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THE UNIVERSITY OF ALBERTA

BREASTFEEDING AS PRIMARY ELICITOR OF THE RELAXATION RESPONSE

by

© EVANGELINE M. L. WALKER

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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OF MASTER IN EDUCATION

IN

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DATE: March 10, 1981

ABSTRACT

The main purpose of this study is to develop a contextual, theoretical framework in which to look at breastfeeding as primary elicitor of the relaxation response. In addition, it represents a small aspect of my attempt to make meaning of certain aspects of my life experience, in order to see them in as wide a context as possible. The thesis is thus my attempt to unite personal experience with a more theoretical knowledge.

A part of this personal process has included the conducting of a single case study. I followed a young couple through the birth of their first child, and the first nine months of sharing their lives with that child. They had elected to breastfeed the baby. Since relaxation is known to correlate with an increase in peripheral skin temperature (Green and Green, 1977), temperature readings of mother and baby were taken during six nursing periods spanning the first four months.

This theoretical and single case study can be regarded as a pilot study. From it arose three further approaches that could be used to study the general and underlying question that now, at the end of writing the thesis, is guiding my thinking. The question can be formulated as follows: Can the willingness and ability to successfully breastfeed be regarded as an index of the parents' general attitude to the relaxation response and all its attendant complexities?

Science is the art of creating suitable illusions which the fool believes or argues against, but the wise man enjoys for their beauty or their ingenuity, without being blind to the fact that they are human veils and curtains concealing the abysmal darkness of the unknowable.

C. G. Jung
as quoted in Davis & Lane, 1978:45

Acknowledgements

This thesis would not have been possible without the open involvement of Pam, Kent and Matthew Taylor. They have shared to much of themselves with me at such a particularly significant time in their lives. I shall always be grateful for their generosity and personal insights.

My thesis spirals around an inner question: What do women of the aquarian age have to offer to the evolution of consciousness? In my quest I have been inspired by two remarkable women who have embarked on their personal healing journeys with deep commitment and integrity that eventually led to formalized research. Josephine Elkes has offered me insight, encouragement and gracious hospitality through my very tentative beginnings. Marion Woodman shares perspectives and guidance.

George Fitzsimmons, as chairman of my committee, has never once come between me and my enquiry. I consider that a remarkable achievement. He has offered me consistent quiet support and appreciation. Dr. Norman Thomas has inspired me through his ability to see poetry in physiology, and his commitment to the beauty of traditional science. Bob Frender is the only man I know to have deeply immersed himself in the literature of women. He also has the special ability of actually seeing individual trees in the forest -- and so he has challenged me.

Although not directly involved in my thesis, two other men have supported my growth. Dr. W. Schmidt have me a chance. And Allan Vanderwell is a rare man who knows how to watch magpies.

But most of all I am indebted to my daughter, Nicholette, whose remarkable descent into my life still enriches and enlivens me.

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CHAPTER I

INTRODUCTION

Purpose of the Study

The main purpose of this study is to develop a contextual, theoretical framework in which to look at breastfeeding as primary elicitor of the relaxation response. In addition, it represents a small aspect of my attempt to make meaning of certain aspects of my life experience, in order to see them in as wide a context as possible. The thesis is thus my attempt to unite personal experience with a more theoretical knowledge.

A part of this personal process has included the conducting of a single case study. I followed a young couple through the birth of their first child, and the first nine months of sharing their lives with that child. They had elected to breastfeed the baby. Since relaxation is known to correlate with an increase in peripheral skin temperature (Green and Green, 1977), temperature readings of mother and baby were taken during six nursing periods spanning the first four months.

This theoretical and single case study can be regarded as a pilot study. From it arose three further approaches that could be used to study the general and underlying question that now, at the end of writing the thesis, is guiding my thinking. The question can be formulated as follows: Can the willingness and ability to successfully breastfeed be regarded as an index of the parents' general attitude to the relaxation response and all its attendant complexities?

Personal Background to the Study

In retrospect, it is easy for me to see that this study has been a long time in the making. If my thesis is correct then the way I was nurtured as a young child would have affected the view of the world I have elucidated for myself, and therefore my approach to this topic. Since my childhood was spent in India, where breastfeeding is the norm, my view of normalcy is possibly different from someone only exposed to a non-breastfeeding society. I have also spent ten years of my life in England, where again breastfeeding is more traditionally accepted. However, at present I have a limited ability to reconstruct my early life, and so I shall refer only to my first conscious involvement in the topic when breastfeeding my now nine year-old daughter.

This nursing period was the first time in ten years that I was completely free of asthma though I had had no 'shots'. My asthma had started when I left home to attend university. This period in my life was also a time when I was caught up with 'the death of God' that was accelerated by the Bishop of Woolwich's debate, and the work of others like Bonhoeffer and Goldman. Certainly, my own God died and I found it a great relief to be free of his demanding vengefulness.

Although I recall that early period with my child as a time of tumultous adjustment, it was also the first time that I did not have to rush anywhere since I was not working outside of the home. It was also a time when I was, and had been for nine months of pregnancy, scrupulously careful about my diet.

During the nursing period I became aware of my body in a new way, finding myself confused at being so physically close to someone for such long periods of time, and confused by the compelling rootedness

to my body. At times the personal and interpersonal demands were overwhelming. There were other times of unbelievable peace and body contentment that defied logical description: I felt like a bear in a cave with my cub.

My perceptions of time changed -- there were strange distortions I had not experienced before. Some times each second would become an eternity; at other times hours would slip by without notice. I often felt that I had, in fact, given birth to myself. For the first time I knew why children had been called our 'perpetual messiahs' -- my daughter showed me new delights every day.[1]

But times changed. My asthma returned, but never with its previous intensity. Although I was still nursing my baby I went back to part-time work the following year. The next time I was free of asthma I was also working part-time but I had started to run. Running made me re-establish contact with, and learn from, my body. On the one hand I discovered that I would over-exert myself "so that" I "could" collapse sooner! On the other hand, when I learned to pace myself evenly, I realized that I was afraid of my body strength carrying me along. I had little sense of body trust at the beginning of this period, and had not previously realized that I had been fooling myself like this.

I found myself remembering these times of 'nursing' and 'starting to run' seven years later when I was working on stress management techniques with an eleven year old, non-breastfed, asthmatic boy. At this time I was gradually becoming involved with the literature of behavioural medicine. I discovered that my responses to breastfeeding my daughter had involved me in a type of awareness that is frequently developed in people who learn the relaxation response (Nideffer, 1972). For instance,

there was increased body awareness, more trust in body processes and more trust in relationship, alterations in time perception, a greater ability to access imagery, and finally, warm feet. So I wondered if nursing a baby would allow the mother to more easily enter a state of relaxation that she would communicate to the child, not just through passing on her steroids, but by the way she held and soothed the child, by her tone of voice, and her general ability to 'flow with the Tao'. In sum, I was beginning to wonder whether the earliest feeding period of a child contributed to his adult ability to elicit the relaxation response.

Early Theoretical Background to the Study

I discovered that the least understood area of stress research is the precise way in which psychosocial stimuli are converted into psychological stress reactions. Wolff (1953) explains that stress becomes the interaction between external environment and organism, with the past experience of the organism as the major factor. In other words, past experiences predetermine the way in which people react to their environment. One crucial experience of all people is the early nurturing experience of babyhood. Although it is well-known that mismanagement of this stage (Erikson, 1965) can lead to later problems, this topic has not been fully explored from a biopsychosocial point of view.

I have not found any literature that specifically talks about breastfeeding as elicitor of the relaxation response. However, I did find several theoretical clues that suggested that my personal experience and speculations might be pointing in an interesting direction for further inquiry. For instance:

1. Breastfeeding involves mother and baby in elaborate, inter-

connected endocrinal and other adaptive changes. For instance, oxytocin (which has a relaxing effect) is released in the mother. Steroids (which protect against trauma) are ingested by the baby.[2]

2. Retrospective studies have found that psychosomatic diseases correlate negatively with breastfeeding (Hamilton, 1977). That is, those individuals who were breastfed tend to develop fewer psychosomatic diseases.

3. I had noticed some connection between my child's sucking patterns, visual activity and relative state of peace or restlessness. I now began to wonder if the reduced visual activity of a nursing baby might be associated with alpha and relaxation.

4. Breastfed babies usually spend longer sucking than bottle fed babies (Kitzinger, 1978).

5. Lowen (1972) has suggested that breastfeeding deepens the child's respiration and increases his metabolism. The breastfed baby achieves deeper states of relaxation than bottlefed babies.

6. Increased skin contact, known to sooth young children (Montagu, 1971) is facilitated by breastfeeding.

7. Breastfeeding demands more active sucking by the child. Could this represent an early aspect of self-regulation? Could this active sucking be looked at as a balancing process where the activity leads to physical pleasure and satisfaction and eventual relaxation?

8. Women who nurse their babies are less prone to cancer, and cancer appears to be stress related (Pelletier, 1977).

A well documented increase in stress triggers and psychosomatic disturbances this century (Pelletier, 1979) has been paralleled by a decrease in breastfeeding (Newson and Newson, 1963). Although we can

no longer think of disease using a simple cause-effect model, it is possible that breastfeeding presents an indicator of the general quality of the home environment that fosters the relaxation response.

This relaxation response (Benson, 1974) is based on Hess's trophotrophic response (Pelletier, 1978) which is the individual's movement towards deep relaxation (Greek Trophos: nutrition). On the other hand, the "flight or fight response", which constitutes the body's most comprehensive reaction to extreme stress, can be considered as an ergotrophic response (Greek ergos: work). I therefore began to wonder if demand breastfeeding could predispose a child to a "world view", and a way of life, that allows for a healthy balance between "being" and "doing" and between receptivity and assertiveness. Could it be that in an optimal early feeding situation the young baby is not just nourished by milk, but possibly by the total nutrition of relaxation?[3]

Approach to Research

1. Original Plan

The traditional approach to a problem is linear and reductionist, searching for 'causes' of events and for conclusions. I had originally intended to do a traditional study comparing the relaxation responses of groups of breastfeeding and non-breastfeeding mother/child dyads. I had hoped to find an observably 'simple' relationship between breastfeeding and relaxation. But the more I thought about the proposition, the more I deemed it impossible to acquire the data I would need to support my hypothesis -- even if it was correct! There would be just too many variables to isolate. Even if I could demonstrate my thesis with a small number of variables (an

important aim of empirical research) I felt that I could never generalize back to other circumstances because there were just too many complexities in real life.

2. A Phenomenological/Alchemical Approach to Research

As I looked at both the topics of breastfeeding and relaxation I began to realize that they were embedded in cultural expectations and value systems and societal life-styles. It is these 'non-tangibles' that effect the way we perceive and participate in phenomena. And so the theoretical aspect of the study is an attempt to comment on aspects of our society that govern our perceptions and involvement in the 'activities' of breastfeeding and relaxation. Since I was moving into a paradigm not based on the concept of linear causality it seemed inappropriate to use a linear research model. A phenomenological approach, on the other hand, attempts to arrive at understanding that is unlike explanation in that it seeks not basic causality but rather a nexus of "meaning" relationships. For Spranger "understanding is that complex theoretical act in which we grasp the inner, meaningful nexus in the life and actions of individuals." (Giorgi, 1970).

It is not the sheer presence of bias that vitiates data. Data is always biased because the researcher can never be without presuppositions and values. The best 'defense' the researcher has, therefore, is to attempt to elucidate her basic values. This in turn allows the reader to understand the limits of this study and the extent to which it is possible to generalize from it.

For the purpose of this study there are five basic values that I wish to comment on. Firstly, I am interested in the development of a society in which people can express and fulfill themselves. Secondly,

I value the complexity and variety of lived experience. Thirdly, I think it is important to combine intuition, introspection, and artistic expression with empirical validation in order to come to grips with biopsychosocial problems. This ability to synthesize approaches is a long-term developmental goal I have for myself. Fourthly, I place particular value on being in touch with feelings because they are the 'valuing' function of our personality, and therefore indispensible for making aesthetic assessments on which all moral and practical judgments are based. The fifth value of specific importance in this study is that I value pregnancy, child-birth and breastfeeding as turning points that bring with them unsettlement and the dislodging of habitual solutions which have become inappropriate. In other words, they offer men and women opportunities for personal growth and development. These are not chances to frantically "self actualize" or "mature -- but rather, special opportunities to watch life unfold and to be consciously involved in that blossoming process. The French psychoanalyst Racamier, suggests the use of two words -- maternite and maternalite (Breen, 1975). Maternite refers to the biological events. But maternalite refers to the psychological and emotional development which takes place when these events are assimilated and integrated. And it is maternalité which I value.

The fact that this study pertains to women's experience requires specific attention. The subject of "women as mothers", an integral aspect of my study, has generally been neglected, considered a 'soft option', or looked at solely in relationship to child development (Kitzinger, 1978). Furthermore, the traditional approach to problems which I am not using is typical of 'masculine consciousness' (which of course women can exhibit too). It is the current reigning paradigm that

has dictated our conception of reality and approach to enquiry. A phenomenological approach, on the other hand, is oriented to the personal process of research. The "conclusions" are frequently dense and complex and devoid of tidiness and thus much more typical of feminine consciousness. Phenomenological research requires a definite and stated personal involvement, not detachment. In fact, Polanyi (1958) considered this quality of motivation to be essential to any research, since it is this that allows for the motivating energy to search out intricacies and connections that in fact make up the "entity" being studied. So that not only am I writing about women's experience, I am also using a 'feminine' approach.

Furthermore, my way of coming to understand balance, homeostasis, beauty and poise, is couched in the language of 'masculine and feminine' consciousness. The study has therefore been a useful vehicle for helping me clarify and conceptualize my notion of 'the feminine'. Very few studies actually define 'femininity' (Breen, 1975) and so this is an important theoretical issue. Maslow explained that through his study of peak experiences he had learned to look at women and to feminine creativeness as a good field of operation for research because

> it gets less involved in products, more involved with the process itself, with the going-on process rather than with the climax in obvious triumph and success. (Maslow, 1977, p. 229)

The time of birth and immediate post-natal period are perhaps the best times to see the fruits of the balance and fusion of masculine and feminine opposites, -- literally, symbolically and behaviourally.

And so my study is also a personal search for beauty and poise, a personal journey to find the roots of the spiritual quest within human <u>embodied</u> experience. In other words, I have used the experience

of my research, consciously, as a means of developing for myself a theoretical framework where body, mind and spirit are seen to function together, where science cannot be separated from elegance, and where art and physics can contribute to the apprehension of our world views and paradigms.

Perhaps the best way of appreciating this approach to research is to liken it to the process of alchemy where the function of the experiments was to act as a mandala-like focus for contemplation (Rozsak, 1969). To think of alchemy only as a failed magic that could not change dross into gold, "betrays the degeneration our consciousness has suffered". It worked in the way that mattered most -- it retrained and transformed the understanding of the searcher by leading him to an experience of the 'world' that can be fully apprehended only when his 'ego' can be momentarily set aside.

Since art is perhaps the best medium for communicating cultural characteristics and values (Shahn, 1957), I found myself reading how artists talk about their work. In particular, it has been the writings of women artists that have helped me clarify differences in masculine and feminine consciousness, and that have helped me appreciate that women have traditionally surrounded 'birth' and the 'nurturing of children' with their own art forms, which have been systematically repressed by a masculine dominated society (Snyder-Ott, 1978). Furthermore, these women have shown me that birth itself is perhaps the best symbol of creativity since in it we see so clearly that <u>true</u> clarity, brilliance, precision, and 'quintessential essence' can only be given birth from out of the fecund maternal matrix of chaos, darkness and paradoxically, containment.

And since I am a teacher by training it was easy for me to appreciate that this movement of psyche between chaos and clarity, masculine and feminine, has far-reaching implications for an understanding and fostering of the learning process in general. It was not coincidental that Plato likened the teacher to a midwife who was there to facilitate the person's birth of themselves.[4] Each new aspect of learning is a 'mini birth' because it involves the creation of perceptions by a person who is thereby extending his selfhood. Each 'mini birth' also involves the person leaving one known matrix of experience for another -- a risky enterprise that can only be attempted well from a base of security.

And so, although the main focus of this personalized study relates to whether the relaxation response is elicited in breastfeeding mother/baby dyads, it also of necessity, addresses such topics as human learning and creativity, the changing roles of men and women in our society, the form of scientific research and paradigm shifts. And these topics have been explored by a woman who, like Seyyed Hossein Nasr and Rozsak, believes that

> our science must once more learn to contemplate
> nature not as an independent domain of reality
> but as a mirror reflecting a higher reality,
> a vast panorama of symbols which speak to man
> and have meaning for him. (Roszak, 1969, p. 372)

Notes

1. Interspersed throughout this study I have purposely used allegory and metaphore even though I am well aware that "rhapsody and myth -- the prime linguistic carriers of symbolic resonance -- have ... ceased to be regarded as sources of knowledge" (Rozsak, 1969) particularly in the scientific community. We generally educate with the misguided assumption that the meaning of things can be exhausted by making good, clear, logical talk about them. However, the meaning of words is really in their resonance that can be communicated by the use of transcendent, verbal symbols (and perhaps even better by nonverbal symbols). When personal knowledge or existential knowledge is present we are invariably left knowing more than we can say.

2. From discussion with Dr. N. Thomas.

3. In phenomenological research it is common to do an etymological study of words representing the focal concept.

4. It is particularly fascinating for me to contemplate that Socrates' mother was a midwife and I wonder if this contributed to the unique balance of masculine and feminine approaches that reached such a height in Greek philosophy! (VenDerPost, 1978).

CHAPTER II

BEHAVIOURAL/HOLISTIC MEDICINE

Importance of a Theoretical Framework

The introduction to the thesis has been an attempt to place it within my personal developmental framework in order to see as clearly as possible the strengths and limits of the study.

In attempting to make meaning of my 'data' I have been influenced by the late Gregory Bateson who explained that most of his students were trained to argue inductively from data to hypothesis, but never to test hypothesis against knowledge derived by deduction from the fundamentals of science or philosophy (Bateson, 1972). Bateson suggests that in using this latter approach there is not the usual expectation that 'raw' data will produce new heuristic concepts which will then become working concepts to be tested against more data, and so on. Rather, completely new paths of exploration open up. Bateson maintains that his suggested deductive approach allows us to gain insight into the interconnected, related ideas and events that support and surround the event in question, and allows us to add to true scientific fundamentals by seeing the event embedded in propositions and in the context of process and relationship.

Bateson's approach involves a paradoxical stance -- of starting from two beginnings -- the data or observations, and the fundamental stubborn epistemological assertion -- and then you invent your 'laws' or 'results' by a 'creative wrestling process' (Brand, 1974). He maintains that the researcher must be willing to hold tight enough

to his theory in order to get enough impact with his data, and that the 'subjective' and 'objective' reasoning must be carried on at several levels at the same time to see the many 'pathways' of connection in the hypothesis and design of research. In order words, there are no discrete items or 'facts' that can be 'picked up' and isolated. There are only interconnected facts and varieties of perspectives.

The following chapters -- II, Behavioural Medicine; III, An Holistic Approach to Health Maintenance, IV, Holograms and Child Development; V, Breastfeeding and its Role in Bording for Full Humanity, and VI, Stress, Pregnancy, Birth and Breastfeeding, outline the epistemological, theoretical and abstract base against which the 'data' and observations will be juxtaposed. In effect, the 'data' for this study is not confined to Chapter VII. Such data as exists lies embedded in my process, in my search for meaning, and thus in an important sense, can be found throughout the thesis.

Paradigm Shift and Behavioural Medicine

Predetermined Mechanisms or Purposive Organisms?

Our view of man and his capabilities has changed radically in the last decade. We can no longer regard him as simply a helpless victim in the face of disease, just as we no longer conceive of his autonomic nervous system as completely outside of his control. This change in our perceptions of man propells along parallel changes in how we conceive of healing and the role of those who would facilitate that process. In fact we have been caught up in an ongoing paradigm shift -- a shift in our general conceptions of what is possible, of the boundaries of acceptable enquiry, and the acceptance of what constitute the limiting cases.

The predominant world view, from which we are in the process of slowly moving, had its roots in the concept of 'mechanism' which in turn was based on a particular idea of 'cause' and 'effect', in which one set of circumstances led through rigid linkages to the next, in strict temporal and spatial sequence. It was this concept of mechanism that lay the foundation of the then-new sciences of physics, chemistry and biology. In 1868 Maxwell had effectively "removed" temporal sequence from the notion of causation by substituting simultaneous interactions in a circle with no beginning and no end (closed loop). But it was not his ideas that influenced the development of experimental psychology that was born in Germany. John Watson's New World Behaviourism of the twentieth century rested its case on the notion of mechanism, asserting that Maxwell's ideas could only exist in the metaphysician's imagination. Watson, and other life scientists of the time decreed that organisms could obey the laws of nature in only one way -- "they must be basically passive devices set in motion by external forces." (Powers, 1979).

During the second world war, under the impetus of designing active, "purposive", homing missiles, control theory became a formal system. However, it has taken about thirty years for the 'simplicity' and importance of Wiener's message to be decoded, as it were. This is it:

> Organisms are purposive. Purpose is not a metaphysical concept. Behaviour is a link in a process by which organisms control the most important effects that the environment has on them. (Powers, 1979)

In other words, whereas the mechanistic model maintained that organisms are organized to produce predetermined actions, control

theory says that organisms are organized to produce internally selected perceptions. The organism acts to bring under control, in relation to some reference state, the sensed perceptions.

The Emergence of Behavioural Medicine

This new intellectual climate of control theory and cybernetics, has a vocabulary of 'closed loops', 'feedback loops', and a conception of organisms endeavouring to maintain their world view and their perceptions through their behaviour. This 'climate' has provided a fertile ground for the seeds of behavioural medicine that had its formal debut at a conference held at Yale University in 1977.

Perhaps the most direct precursor of behavioural medicine was psychosomatic medicine which was based particularly on psychoanalytic theories about disease etiology, correlating personality types with certain diseases. But these theories seemed to have outlived their usefulness and it was mainly the psychobiologists who broke off to define the emerging field of behavioural medicine.

The Cartesian mind/body dualism that plagues traditional medicine is gradually being eroded as we realize more and more the incredible complexity of the human organism. For instance, the central nervous system and the endocrine system are connected in more complex ways than hitherto believed, as evidenced by the fact that some hormones have also turned out to be neurotransmitters. It is just such a mind/body link that justifies the defining of the field of behavioural medicine, with its present emphasis on research.

The biobehavioural treatments that there are at this time (such as relaxation techniques, biofeedback) are relatively few and are concerned with diseases related to stress (hypertension, heart disease,

circulatory problems etc.), maladaptive behaviours (stuttering, bedwetting, etc.), chronic pain (which is seen as a complicated psychophysiological experience rather than a symptom of an underlying physical disorder), and obesity (which has emotional, behavioural and physical aspects).

The concept of using feedback to assist the organism to unlearn maladaptive responses ironically comes from behavioural psychology with its mechanistic roots. However behavioural medicine seeks to explain in it a larger, holistic concept. People I know who are involved in the practice of behaviour medicine in fact have a holistic practice and have many treatment modalities at their disposal -- not just behavioural treatments. Psychologists and physicians work together as team members who see their role as facilitating change in maladaptive intra-personal and inter-personal systems.

In general the field is riddled with paradoxes, and this perhaps indicates that we have come (or at least, may be coming) of age -- that we expect and welcome complexity as a heritage of our full humanity, and that we do not expect simplistic answers and solutions to 'what ails us'. This is sometimes difficult when we have been schooled into the idea that something is either right or wrong, that causation is a simple, linear matter, that the human will (not to be confused with will-power) is of no consequence. The most obvious and profound discovery has perhaps been that man can learn to regulate his body functioning through his autonomic nervous system, and that when he learns to do this he invariably begins to realize how his mind and body work together. Areas of investigation in behavioural medicine include looking at how the body maintains a state of balance, of

homeostasis. It is suggested that when in this state viruses and bacteria can cause no harm. The creative use of turbulence is considered important. Researchers are finding out about endorphines (morphines within) that are the body's own substances that control pain. The Greens and Simonton (Green and Green, 1977) in reviewing the literature on the spontaneous remission of cancer have found that the only common factors in these people was a change in attitude prior to spontaneous remission, a change involving hope and other positive feelings. The placebo effect is also being investigated since belief in a cure seems to be important in effecting it. Some placebo researchers theorize that the patient's belief that the placebo will work activates the cerebral cortex, which in turn 'switches on' the endocrine system in general and the adrenal glands in particular.

All these investigations, it seems to me, can be viewed within several overall questions: If the human being can be seen as being whole and balanced when healthy, what sorts of events/perceptions upset that balance such that disease can 'enter' the organism? And conversely, once the organism is in a state of disease what can he or she do - allow - to redress the balance? But the fundamental issue is to ascertain events and quality of environment that originally allow a baby to develop in a balanced whole way.

Perception and World View

I see the psychologist's role in behavioural/holistic medicine as offering insight into the role of perception and human will in health versus illness issues. My specific interest at this time lies in attempting to clarify important aspects of a baby's

early perceptions, and the establishment of his world view. Although I discuss this in detail later, at this point I am simply placing the issue of perception and consciousness into the context of medicine and control theory, specifically with reference to stress management.

It seems very likely that further advances in understanding, and in the development of treatment, will arise from an ever increasingly sophisticated understanding of stress. David Glass defines stress as

> the perception of threat to physical or psychological well-being and the perception that the individual's responses are inadequate to cope with it. (Holden, 1980)

Firstly, it is the individual's perceptions that are of interest, and clinicians want to find out more about the individual's world view. Secondly, the individual's behaviour (both that which he is conscious and unconscious of) becomes of interest, in relation to his world view, since it is by his actions that he controls his world, maintaining some sort of equilibrium for himself, even though it may be maladaptive and produce symptoms. World views become very precious to us all since they are the pivot-point of our rationality, our expectations, our life style and interlocking relationships.

Simultaneous Use of Different Paradigms

Harold Morowitz (1980), professor of molecular biophysics at Yale University, suggests that we are now in a position to integrate the perspectives of three large fields -- psychology, biology and physics. He suggests that we need to use two paradigms simultaneously -- a reductive, physical paradigm in conjunction with an expansive, consciousness based paradigm.

Firstly, the human mind, including consciousness and reflective thought can be reductively explained by the central nervous system and be further reduced to the biological structure and function of the physiological system, which in turn can be understood in terms of atomic physics. Such approaches to physiological psychology, so necessary to free science from theology, had their roots in early Darwinians and are still flowering with Sagan (1977) where he writes

> my fundamental premise about the brain is that its workings -- what we sometimes call 'mind -- are a consequence of its anatomy and physiology and nothing more.

And in the field of behavioural medicine we find Saul Schanberg of Duke University who has isolated a fast action enzyme (ornithine decarbozylase) involved in growth, development and differentiation which he associates with the maternal deprivation syndrome (Holden, 1980).

Secondly, atomic physics can now best be understood by quantum physics (rather than Newtonian mechanics) and these can only be formulated with reference to consciousness. Eugene Wigner (Nobel Laureate) notes how remarkable it is that the scientific study of the world led to the content of consciousness as an ultimate reality (Morowitz, 1980).

It is our consciousness that determines what we see -- even in such simple matters as taking measurements of length and width. Kant, in his eighteenth century masterwork, Critique of Pure Reason, says that in knowing something "it is not the mind that conforms to things, but things that conform to the mind" (Green and Green, 1977). John Lilly (1972) in The Centre of the Cyclone also says

> In the province of the mind, what is believed to be true is true, or becomes true, within limits to be found experientially and experimentally. These limits are further beliefs to be transcended.

And so, as I have been looking seriously and playfully at how young babies possibly develop their world views I have simultaneously and of necessity been caught up in a discipline that is itself challenging the collective viewpoints of a society, and with people within that discipline who are prepared to open themselves to other forms of 'reality' and to 'delimit' themselves as to 'what is possible'. I find that physiology and consciousness proceed together, and that new conceptions of health arise.

Earlier Examples of Behavioural/Holistic Medicine

Of course holistic medicine is not really new. There are old schools of medicine in India, China, Japan and Tibet that give rise to systems of healing which are designed to allow the person to become balanced and well. In China, for instance, where doctors are paid to keep people well, Qi is thought to be the special biological energy of living things, that 'fluctuates' between two polarities and that anything that interrupts this flow of energy will provoke symptoms.

But our own stream of Western medicine, even though it is now predominantly mechanistic, also had its origins in an holistic approach. Interestingly the word 'heal' has its roots in the word 'whole'. Pythagoras, whose concepts form the basis of the Hippocratic oath, referred to a divine energy source which is both at the centre of the Universe and at the centre of living human beings. It is referred to as the 'ultimate heat'. Dr. Henry E. Sigerist, late

historian of medicine at Yale University pointed out the fundamental importance of this notion for medical history:

> The innate heat is the essential part of man's physis, his nature, and it is nature that heals ... The discovery that there is a vis medicatrix naturae, a natural healing power in the human body, a force that tends to restore the lost balance, was one of the greatest discoveries medicine could make. It determined the physician's actions, since it became his main task to understand the intentions of nature, to prescribe treatment that would support them, and to avoid whatever might antagonize them. 'To be helping or at least not harming' became the basic principle of Hippocratic therapy. (Sigerist, 1961, pp. 326-327)

Paracelsus (1943-1541), Swiss physician and alchemist, and Samuel Hahneman (1755-1843), a German physician and founder of homeopathy, are both cited as two of the most prominent figures of the 'vitalist' and holistic school.

There was also Béchamp, a prominent French physician and professor of chemistry and pharmacy, who demonstrated that bacteria were the product or symptoms of disease, not the cause. He suggested that people become ill because their systems are out of balance and susceptible to the growth of bacteria from within, rather than invaded by bacteria from without. E. Douglas Hume who chronicled Béchamps work, believed that Pasteur's germ theory gained ascendency because it was a simple theory and offered a simple solution, and because economic factors entered in -- such as the sale of vaccines.[1] Certainly Pasteur's work has contributed mightily to advances in hygiene, preventive medicine, and the study of cell pathology, but Béchamps work also seems to deserve renewed attention.

Unfortunately, most medical schools have dropped their courses in the history of medicine. This tends to obscure the pattern of

trial and error learning and discovery, and the fundamental origins of our presently accepted body of knowledge. It also increases the likelihood that important ideas which have slipped out of the mainstream of consciousness will be buried under the prevailing orthodoxy of the day.

The Relationship of Women to Organized Medicine

One particularly important aspect of medicine is its relation to women in general and specifically with respect to the processes of pregnancy, birth and breastfeeding. In England it was originally through the Barber Surgeons' Guild which developed in the 13th century that men became involved in childbirth -- as experts -- experts who could use tools. By guild rules only surgeons could use surgical instruments, and so they were called in to 'assist' in difficult births. In 1616 Dr. Peter Chamberlen, a member of the Huguenot family who invented the forceps, wanted to develop a guild of midwives which he planned to teach himself. However, he met a storm or protest on the ground that he did deliveries with violence, and that he knew nothing at all of natural labour (Kitzinger, 1978), which was true![2]

When men did midwifery they charged more than women and by the second half of the 18th century it had become fashionable to use the services of a male physician. At the same time hospitals were built for poor women and their babies who provided clinical material for doctors and their students. Moreover, midwifery became a way of increasing clientele for the doctor. Eventually midwives were told not to aspire 'beyond the capacities of a woman'. By the nineteenth century midwifery had become subordinate to male obstetrics

or male convenience. Even the position of giving birth in our society with the woman lying helplessly on her back was developed so that Louis XIV could peep at his wife giving birth, from behind a screen because he found it sexually arousing!

The history of midwifery goes back and merges with that of witches, so that frequently the midwife was also a witch. Universally, the maintenance of health has largely been the responsibility of women (Kitzinger, 1978) and still is in peasant societies. Here the women use teas, herbal medicaments, massages and psychotherapeutic procedures.

Of course, the witch midwives were the cause of much alarm to the male ecclesiastical powers and to male medicine which was itself regulated by the Church. Szasz (1971) says that

> because of the Medieval Church, with the support of kings, princes and secular authorities, controlled medical education and practice, the Inquisition (witch hunts) constitutes, amongst other things, an early instance of the 'professional' repudiating the skills and interfering with the rights of the 'non-professional' to minister to the poor.

That is, the demise of the non-professional, but skilled person, and the demise of women, went hand in hand.

Still today, peasant and professional midwives tend to see their clients more holistically than the male dominated obstetrical and gynaecological scene. The Nana of the West Indies, for instance, talks of 'freeing' the body of the mother so that the baby can be born. Part of the Nana's function is to regularly massage the pregnant woman. The Nana knows intimately the woman's body and her life-space, and at birth her function is to mother the mother. She

maintains that support to facilitate nursing.

In an important sense healing skills are aspects of mothering. They grow out of an ability to nurture and they are

> an extension of the ability to support inherent processes of growth, while at the same time metiating between the natural and supernatural (Kitzinger, 1978).

The natural and supernatural in fact, are not two functions, and I shall show later (Chapter III) how balance for health is wholly dependent on an equilibrium between the 'natural' and 'supernatural' worlds -- which are made separate only by our words and concepts. It appears that women healers through the ages have known that an individual's natural growth towards wholeness and health is in large measure dependent on his/her ability to balance perception and appreciation of different levels of 'reality'.

Perhaps because of this, and because of an appreciation of 'process' as compared with 'end product', women healers have traditionally had a more holistic orientation to health care.

Summary

Even this brief 'backward' glance into history gives an indication that the still predominant Newtonian mainstream of medical thinking is not the only one. We now have the language and concepts of control theory and cybernetics; psychologists are valuing the physical body and physicians are beginning to understand the importance of the appreciation of 'consciousness'. So, it seems that the time is right to re-explore holistic models of health and renewal through the emerging field of behavioural medicine, and a reappreciation of

'the feminine'.

Our present legacy of a one sided, male oriented world view and resulting medicine, can perhaps be best symbolically and literaly understood through remembrance of the systematic and many-levelled eradication of the feminine. Nine million witches were burned alive (Janz). Throughout this study I shall continue to elaborate on this theme of the supression of the feminine and the resulting imbalance that prevents growth and understanding in important areas.

These two themes -- the emergence of Behavioural Medicine and the repression of the feminine -- have been important in the development of my ideas. I can now only conceive of ideas and individuals as 'embedded in process'. I see people as active agents creating their own realities within interlocking systems so that simplistic 'causes' are meaningless. I now have a greater theoretical understanding of the importance of trying to understand how a child develops his world view. I have a more refined interest in trying to see how researchers' world views affect their work, particularly as it relates to the negation of the feminine. For me, to see the historical roots of the vital links between 'nurturing', 'healing', 'the transcendental experience' and appreciation of the feminine has been crucial for my own personal development within the research process.

Notes

1. Dubos (1979) thinks that the followers of both Pasteur and Descartes have done them an injustice by interpreting them too narrowly. He says that Pasteur's work has been summarized with the maxim: The microbe caused the illness. Look for the microbe and you'll understand the illness." But Dubos reminds his readers that Pasteur also said that if he had to resume his work on silkworms he would focus above all on the conditions under which they were raised since he felt that these conditions affected their resistance to illness. About humans, Pasteur wrote:

   > I'm convinced that where a wound becomes infected and festers, the course that the wound takes depends upon the patient's general condition and even his mental condition." (Dubos, 1979, p. 45)

   Descartes also has been misinterpreted and oversimplified. It was he who said that joy is the most important thing for keeping one's health.

2. It is important to note that the percentage of babies born by Cesarian section in the States tripled in the last decade! (Zero to Three, December, 1980)

CHAPTER III

SOME THEORETICAL CONSIDERATIONS FOR THE ESTABLISHMENT AND MAINTENANCE OF WELL BEING

> (There is) a portrait of a physician by Rembrand, which I consider by far the finest portrait of a physician in existance, although it is relatively unknown. I'd like to describe it for you, to help you understand my conception of the role of science in the practice of medicine. The physician portrayed by Rembrant is making a house call. It's the portrait of a physician who really lived in Amsterdam and apparently was very learned. He's stopped at the bottom of the stairs and is glancing around. You feel that he's in the process of perceiving the total situation of his patient.
>
> Now I've always thought that the ideal physician, if I may say so, is a man who possesses very specific knowledge, but who knows that this very specific knowledge will never suffice for understanding the unique problem posed by the individual patient. So he enriches his (specific) knowledge by attempting to perceive his patient's total (personality), his family situation, and the way in which he lives. Then the physician asks himself to what degree he can apply what he has learned. All this in no way decreases my respect for the very exact sciences; above all, I in no way want to give the impression that I'm rejecting them. But I think the essential thing is to use them in a coherent way and surely not to use them to "prove" what can't be proved, or to "understand" what as yet can't be understood. (Dubos, in Dubos and Escande, 1979, pp. 40-41).
>
> I am not a mechanism, an assembly or various sections. And it is not because the mechanism is working wrongly, that I am ill. I am ill because of wounds to the soul, to the deep emotional self and the wounds to the soul take a long long time, only time can help and patience, and a certain difficult repentance, realization of life's mistakes, and the freeing one oneself from the endless repetition of the mistake which mankind at large has chosen to sanctify. (Lawrence)

Having briefly put the view of Behavioural/Holistic Medicine into an emerging perspective I now explore an holistic approach to health,

in more detail. What exactly does this mean? And how is that one can take responsibility for one's state of health and well being?

Man is One With His Environment

It is perhaps difficult for us to conceive of man as body/mind/spirit unity because we have learned to think of ourselves in reductionist terms as 'matter'. And we generally assume that what is not 'matter' is unimportant anyway. (It does not matter!) And so 'mind' and 'spirit' are of little importance. And because there is no intra-personal unity of course we are not open to feedback of mind/body states.

Furthermore, we generally do not see ourselves as part of, and intimately connected with, the environment, because our society has valued 'conquering' the world, seeing it as something separate and distinct from us. Consequently we are also dead to feedback from the environment because of our lack of 'realized' connections with it. Pelletier describes environmental pollution as

> a graphic form of feedback to the individuals of the industrial nations indicating a fundamental shortcoming in the psychological outlook of the people who assume that unlimited consumption of raw materials, land, energy and the environment will not lead to severe consequences. (Pelletier, 1978, p. 3)

In other words, when considering individuals and societies, the feedback from a single part is an integral aspect of the whole. The part can only be understood by an overview of the purpose and function of the whole (Whitehead, 1921; Schumaker, 1973).

More on World Views and their Maintenance

But perhaps other issues have to be dealt with before this

connection can be seen clearly. The primary and pressing underlying issue is to do with the science of consciousness. How does each individual see himself, in his world? What is his world view? The anthropologist Anthony F. C. Wallace (1956, 1972) conceptualized 'world view' as a 'mazeway'. He said,

> It is ... functionally necessary for every person in society to maintain a mental image of the society and its culture, as well as of his own body and its regularities, in order to act in ways which will reduce stress at all levels of the system. The person does, in fact, maintain such an image. This mental image I have called 'mazeway' ... The 'mazeway' is nature, society, culture, personality, and body image, as seen by one person.

(In Chapter IV I shall endeavour to show how 'body image' is indeed a reflection of societal values.)

To know something of a person's world view, or mazeway, is of critical importance -- whether that person is trying to reach new levels of health/wholeness, or whether he is involved in theorizing, research or clinical work. This is because it is his world view that dictates, to a large extent, what he apprehends. The minds of most adults do not conform to what is perceived; rather the mind dictates what is apprehended and the form it will take, and thus expectations become self-fulfilling prophesies. The 'self concept', within the individual's world view, can thus remain undisturbed. In this sense the individual has 'control' over his world. And even if this is maladaptive, it does allow for stability -- and this seems important to most people.

A simple example of this came to my attention as I wrote this chapter. A little boy of six started to cry and leave the group of

children who had been playing a game that necessitated their shouting out their names, in turn, so that the ball would be thrown to them. This little boy did not shout out his name, and so of course, nobody threw him the ball. However, he was convinced that nobody threw him the ball because nobody liked him. It was actually not surprising that he 'could' not shout out his name because he had such low self esteem having been rejected by his parents and several foster parents. In fact he keeps changing his name, draws very disintegrated pictures of himself, and cannot name large portions of his body. This poor "view of himself" and lack of personal acceptance and awareness predisposes him to perceive the world as a hostile place -- and consequently that is how the world 'is'. He does meet more and more rejection -- in his eyes. To allow himself the opportunity to perceive the world as accepting and welcoming would entail a change of self-perception, as suggested in control theory.

Structuring the world in this manner is also a feature of the process of making science. Sir Arthur Eddington, in The Philosophy of Physical Science, suggests that if the scientist looks carefully at his 'formalisms' they appear to be descriptive of the structure of his own mind. In other words, ontology is equivalent to epistemology.

"Consciousness" as Contributing to World-Views

Further insight on world views and their maintenance can be gleaned from the study of consciousness. Kenneth Pelletier is director of the Psychosomatic Medicine Clinic in Berkeley. He has outlined in his most recent book, Toward a Science of Consciousness (1978), a possible theoretical structure of the nature of consciousness that

will facilitate deeper understanding of what are anomalies in our present paradigm, and that will be suggestive of further research directions.

From an eastern perspective the dynamics of consciousness have always been known to govern the behaviour of matter. However, to date in our Western perspective there have been two predominant schools of thought. On the one hand, the tradition of Aristotle, Descartes and Wittgenstein, materialistic in orientation, does not allow for the spontaneous generation of mind. On the other hand, the metaphysical idealism of Plato, Kant and Hegel, made even more extreme by Locke, Berkeley and Hume, suggests that material reality is only 'illusion' and a by-product of the mind. Both approaches suggest only one form of reality that frequently cannot account for much of the data from scientific/experimentation. A third approach explicated by Karl Popper and C. D. Broad (Pelletier, 1978) suggests that mind and body are inextricable interaction.

Although physicists can happily exclaim that there are 'no things' as a result of their work in subatomic physics, Dr. Fritjof Capra explains that on a daily level this is not true. He carefully stays out of the way of buses, for instance (Oyle, 1979). In other words, 'objects' and 'mind' can be thought of as separate and joined. What is important is to see through the illusory barrier separating the psyche from objects and events, or mind from matter. Although Pelletier uses the models of physics to explain the intricacies of the 'human psyche in interaction', he is careful to explain that it is premature for us to decide whether there are direct correlates between physics and consciousness, or whether we are dealing with metaphore.

What does seem clear is that at this level of analysis the method of enquiry and subsequent interpretations become more ambiguous and conclusions become probabilities rather than certainties" (Pelletier, 1978, p. 46).

'Mind' Versus 'Brain'

At present, holistic research (neurophysiology, psychology, states of consciousness, classical Newtonian physics, contemporary quantum physics) has produced a holographic multidimensional model of consciousness (Greek: Holo: whole, graph: to write). A hologram is an image in which the whole is written into each of the parts, and each part can generate the whole.

Holographic models of brain functioning were first developed by Karl Lashley in the 1920's. However, they were problematic until the development of the laser beam in the 1960's. More recently, Karl Pribram has developed the models (Pelletier, 1978).

This model is useful for explaining several very important concepts. If the brain functions as a whole, within a mind/body continuum, how is it that when certain parts of the brain are electrically stimulated a specific event will be remembered? (Actually, the same sort of thing occurs when specific muscular blocks are removed through rolfing and bioenergetic work.) A holographic model, can resolve this theoretical dilemma because it can account for both localized functions as well as the fluidity of that specialized information being stored throughout other areas of the being. Properties of time and space are completely elastic in this model. Just as memory can be encoded in an infinitesimal space so memory can be

retrieved from an infinite array of possibilities.

In the holographic model neural functioning differs from the conventional concept of this process. This latter is a model of "relatively gross activity associated with binary, conducted nerve impulses". In addition to these, holographic theory and experimentation suggests that there are "graded, slow potential changes that wax and wane continuously at the junctions between the neurons. Pelletier (1978) postulates that, since these slow wave potentials can be influenced by infinitesimal amounts of energy, they can provide us with a model by which we can conceptualize how the subtle phenomena of consciousness may interact with subtle physical brain properties.

In addition, these slow wave potentials being exceedingly minute, are extremely sensitive to the chemical medium that surrounds nerve cells. In this way we can understand how biochemical imbalance (either drug-induced, or spontaneous), environmental influences, and biological rhythms affect behaviour.

It is interesting to note that both meditation and biofeedback training have been associated with sustained low-frequency brain wave activities in ranges comparable to the range of the slow potential wave found at neuronal junctures. Possibly this sustained low frequency activity affects nerve transmission to induce the relaxation response.

Holographic and quantum mechanical models of the brain, therefore, allow us to develop a model of mind-body interaction where subtle properties of consciousness can be shown to have profound effects upon physical processes. It seems as though

> "the brain functions not as a generator of consciousness, but rather as a two way transmitter and detector. That is, although

> its activity is apparently a necessary condition, it cannot be a sufficient condition of conscious experience. (Burt, 1968).

It now becomes necessary to postulate consciousness as an "active, organizing principle that coordinates the divergent functions of the physical brain in a focused and purposive manner and operates at the quantum level where mind and matter are in inextricable interaction" (Pelletier, 1978).

Thus, holographic models oblige us to take note of man's images, sensations and emotions, because they show a man's view of himself, other's and his world. In other words, a man's world view, his consciousness, effects his physiology and his state of health.

The next issue is to try to ascertain whether there is a state of mind-body-consciousness, a world view, that is more likely to allow for health than certain others. To propose 'an answer' to this issue I have turned to a discussion of brain wave research and man's embodied spiritual development.

Brain Wave Research and Spiritual Development

During the sixties it was thought that alpha states were always related to simple reduced visual activity. More recent research of Mulholland and Peper (1971) and others, suggests that alpha production is much more complex than was originally thought and that it shares an interface with meditation, the relaxation response, biofeedback and automatic self-regulation. For Pelletier (1978) it raises, amongst others, the following question: Is alpha activity the threshold of voluntary control of internal states?

It also seems likely that theta states are concerned with the querulous relationship between creativity, with the accessing of images,

and with madness. As such it presents an invaluable means of exploring the deep roots of mental phenomena. And although brain wave research is in its infancy and we can draw no firm conclusions it does seem likely that alpha states allow for receptivity and passive volition, and that theta states allow for conscious internal focus upon intra-psychic processes. As such, the alpha-theta continuum seems to offer "significant creative potential to the individual subject" (Pelletier, 1978), and it would appear that being able to access these states is of crucial importance for an individual's homeostatic balance and health maintenance.

Furthermore, brain wave research also suggests that the highest state of spiritual development allows for complete involvement in daily activities: there can be high physiological activation accompanied by an EEG record indicating a neurological state of deep relaxation (Schwarts, 1977; Green and Green, 1973, Pelletier, 1978).

And so from an initial exploration of Cartesian dualistic mind/body issues, the frontiers of interdisciplinary science have propelled us into accepting a mind/body unity that must take account of an activating source of life-consciousness for which we have no words. Certain mind/body states allow for an intense conscious involvement in the environment, but without 'attachment' and aggression. This is surely an attitude that would not perpetrate faulty feedback systems that allow for the plunder of the earth matrix, along with the demise of individual states of health. And so it is possible to see how intra-personal feedback loops interlock with inter-personal and environmental feedback loops since essentially we are talking about

the interplay of 'energies'. It is also possible to begin to understand that an awareness of a 'higher order of reality' has personal physiological correlates. That is, spiritual awareness, even at its most rudimentary level, or perhaps especially at its rudimentary level, is rooted in 'body knowing'. An individual's world view and body image have important interconnections. When a person's world view and 'self conception' allow him to experience 'higher reality' his body cannot help but be affected. The reverse is possibly also true. A healthy body fosters the appreciation of a higher reality.

Healing and Numinous

Many traditions, such as Eastern literature, poetry, mythology, alchemy, the subjective accounts of mystics, saints and modern astronauts, have suggested that the experience of the 'higher self' is a necessary prelude to the marked transformation of the individual. Jung has perhaps been one of the few early psychologists to insist that the only event that can bring about healing (or becoming more whole) is an openness to an experience of 'the numinous'. He describes a healthy person as one who can balance ego and Self -- one who can maintain himself in a state of balance with the numinous, and who can flow smoothly with life's energies. Jung described the ego as a 'complex'. As such, in his theoretical framework, it can 'disappear'. Jung maintains that healing comes through in time of its disappearance. This is when the individual is in touch with his true Self and able to allign himself to the healing energies of the cosmic and personal hologram.

It is important to explore what this means because there are essential paradoxes contained in it. The first paradox revolves around

the general conception of 'the numinous' as coming from ourside ourselves. In fact the numinous experience usually allows the individual to become conscious of their god-like-ness, from within. In Jungian terminology they make connection with their true Selves -- not in a state of hubris nor yet in a state of self-negation.

The second, but associated paradox, concerns our view of the body. We are used to considering the numinous as something 'ethereal' and certainly apart from the body. But I have already explained that we can no longer think of mind and body and spirit as separate entities. In fact, the transcendent experience is firmly rooted in mind/body sensing. It is true that the numinous experience links the individual with the 'cosmos' in a unique way so that he feels part of it. But the experience does not allow him to conceive of himself as 'over against' the world: it seems as though he perceives his rightful place and is deeply connected with his world. There is a sense in which his being is 'consciously' part of the cosmic hologram -- able to know all, sense an at-one-ment with all, sense the one-moment and yet timelessness of 'reality' with a sense of ego-forgetfullness.

Of course, many psychiatrists have confused mysticism with schizophrenia, and as a reaction to that stance, others have viewed schizophrenia as only super healthy (Wilber, 1980). But Wilber maintains that whilst a "successful schizophrenic episode", a type of death and rebirth experience, can be important in producing a well adjusted ego, the person is not a transcended self, nor an enlightened self. But when the ego is well adjusted there is <u>then</u> the possibility for the experience of the Divine. Laing talks about true sanity that arises

> in one way or another, (from) the dissolution of the normal ego, that false self competently adjusted to our alienated social reality: the emergence of the inner archetypal mediators of divine power, and through this death a rebirth, and the eventual re-establishment of a new kind of ego-functioning, the ego now being the servant of the Divine, no longer its betrayer. (Wilber, 1980, p. 114)

Early Embodied Consciousness Leading to Mature Spirituality

Wilber and Laing suggest that the most crucial stage in human development is the 'body stage' where consciousness is supposed to become firmly rooted in the body and that

> failure to seat consciousness in the body leads, during subsequent development, to an exaggerated split or dissociation between mind and body, and the fabrication of a "False-self" system.

This crucial 'body stage' of consciousness development occurs early in life. I believe it to revolve considerably around the issue of nurturance.

As an example of a false self system, the schizophrenic tends to suddenly experience his 'mind' as being 'self', while the body is felt to be 'other' and the individual denies social 'reality' functioning. On the other hand, the mystic seeks progressive evolution and he trains for it -- often for a life time. The mystic

> maintains potential access to ego, logic, membership, syntax, etc. He follows a carefully mapped out path under close supervision. He is not contacting past and infantile experience, but present and prior depths to reality (Wilber, 1980, p. 158)

> To return to the Divine, one doesn't regress in infancy. Mysticism is not regression in service of the ego but evolution in transcendence of the ego. (Wilber, 1980, p. 159)

In sum, the mystical experience, which is potentially available to us all and which represents a high point in human evolution, emerges from within the individual whose 'ego' is planted firmly within the cup of his body. Such an individual can thereby maintain 'reality' contact with himself, and his environment.

When now I think of this transpersonal consciousness, this 'mystical development' I have a greater understanding of the personal necessities required for our perfection. Aurobindo talks about five necessary qualities which I list below (Green and Green, 1977, p. 266), and to which I add my own expansion in the light of my 'developing' theory.

1. Balance and tranquility. The ability to elicit the relaxation response.

2. Heightened, enlarged and rectified power of our normal nature, the body, emotions and the mind. 'Muscular mindedness' or mind/body balance. (I elaborate more on this in chapter IV.)

3. The body must function automatically and smoothly in order to be used by the life force. Matter and energy are now seen as one continuum along which life's energy can flow unimpeded, in the fullest sense. For the continuum to remain 'unblocked' an appreciation of the feminine and of the importance of the body is essential.

4. Perfected intelligence whose sole will is to mirror the truth and which is open to all forms and varieties of understanding. This openness cannot occur in a defended personality. Where the body self stage was traumatized intelligence will tend to be always hierarchically skewed and out of touch with reality. (This idea is also developed in more detail later.) In addition, the open individual

can accept information coming from 'within' himself or from 'outside'. In a holographic model there is no essential difference between 'in' and 'out'. When viewed through such a model certain events become immediately understandable in their space-time dimension. Jung and Progoff (1973) have elaborated on this theme through their work on synchronicity showing how 'inner' and 'outer' events are linked acausally but with great meaning and enrichment for the individual.

'Will power' Versus 'Personal power'

In this theoretical section it is also important to make the distinction between 'will power' and 'personal power'. They give rise to different responses to the 'environment' and they arise from within a different psychophysiological state. I have recently been working with a young man, suffering from stomach ulcers and whose abused child had been apprehended from his care. He explained, during his first biofeedback-guided relaxation session, that for the first time in his life he felt as if he were being "carried along" as compared with "being pushed along" -- which was how he usually felt.

Being thus 'at ease' and 'contained' within a body state of relaxation gives rise to a feeling of personal power -- perhaps because the individual's energies are at last united and the individual is not fighting the world and his own body, so to speak, in an effort of will-power.

Earlier in this chapter I showed how consciousness affects physiology. This present example shows the reverse situation -- physiological states, affecting consciousness. Volition, determining our 'state of being', is a mind/body interaction.

Higher levels of consciousness, it seems, can only proceed from the unified state of relaxation and 'body containment'. It is perhaps not co-incidental that our society undervalues both the experience of the sublime (Green and Green, 1977) and the relaxation response.

Summary

So far I have tried to present a conceptual framework in which my study is developing. I have placed it within the emerging field of behavioural medicine that allows for a holistic view of man his state of health, and the importance of holistic health care specifically as it relates to pregnancy, birthing and breastfeeding. I have also very briefly explored some necessary underlying theoretical constructs that will allow us to, in fact, shift into a holistic, holographic paradigm. These concepts relate to worldviews and their maintenance; important aspects of mind/brain/body consciousness; wholeness of action; the nature of healing. I have also particularly suggested the importance of the early rooting of consciousness in the body, for eventual appreciation of 'higher realities' so essential for health maintenance. Now I shall continue to develop this theoretical framework to see how an infant can be nurtured so that he is best able to experience life as a balance between ego and Self, so that he experiences health, satisfaction, joy, and a personal feeling of power, as well as a sense of belonging to his environment.

Notes

1. When the mind/body continuum is viewed in this way it is much easier to comprehend how it is that healing can be facilitated by sound (Cymatic Therapy) and light (Manners, 1980; MacIvor and LaForest, 1979).

CHAPTER IV

CHILD DEVELOPMENT FOR A STRESS-ADDICTED LIFE STYLE

Introduction

To date our society's exploration of a child's early development has not used the language and concepts of holographic and biopsychosocial theory to any large extent. Of course, it is now perfectly clear that the child's interactions with his world are much more complex than we had originally believed. In other words, we can no longer think of the infant as an 'inert lump of clay' to be moulded and arranged by his environment, or a 'tabla rasa' to be inscribed upon (Schaffer, 1974). Of course, there have always been those scholars who have been alive to the complexity/simplicity of human interaction. One such person is Margaret Mead who has described each interaction of the caregiver with the child as containing the whole cultural complexity. Similarly, with respect to this specific thesis topic, a report on breastfeeding in Sweden recently stated that problems in breastfeeding could not be easily corrected because they were part of the social and economic development of the country (Hofvander and Sjolim, 1979).

However, in order that my conceptual framework be elucidated further I have found it necessary to extend my thinking about holograms, health, and healing into the area of early infant attachment and development. I have shown in Chapter III that a hologram model is, to date, the best one we have for providing an analogy of brain functioning, and the mind/brain/body interaction. The model is useful in showing how consciousness and volition affect physiology and vice versa, and how important a person's 'world view' is in the maintenance

of his 'system of health'. Since 'world views' are primarily established in early childhood I consider it important to begin to apply the language and concepts of the hologram model to the study of child development.

A Review of Theories of Attachment

Several theories have proved inadequate for this next step in the development of my theoretical framework. For instance, Dollard-Miller's secondary reinforcement model, Gewirtz's instrumental/operant learning theory, the Hoffman-Solomon opponent-process model for affective dynamics of attachment, and Cairn's contiguity analysis, are all linear models and therefore not particularly helpful. In addition, they have been criticized for not explaining data we already have (Rajecki et al., 1978).

In addition Lorenz's 1937 paper on imprinting, though it provoked an enormous amount of research has not proved correct in application to humans because of its simplistic nature (Rajeki, et al., 1978; Schaffer, 1974). Thus it has been unhelpful to me.

Freud's theory presented a possible partial framework for this study. He suggested in 1946 that the social bonding of human infants involved tension reduction and occured in stages which had an anaclitic basis -- that is, they were based on the child's dependent need to be fed.

> As the child's awareness developed, the child recognized the immediate source of its pleasure, and its love shifted to the milk, breast or bottle. Later the child became aware of the ultimate source of tension reduction via feeding and then felt love for its mother or caretaker. (Rajecki, et al., 1978).

Ainsworth (1969) faulted Freud's position on comparative grounds since other species form social attachments independent of feeding experiences. However, it may be that Freud's theory could be reconstructed using a biopsychosocial model to document possible changes in tension levels. Furthermore, it is my thesis that the feeding situation, as an essential element of the early bonding experience, actually provides that primary experience which is an indicator of the general type of climate the child encounters, and which ultimately allows for the possibility of the child reaching his full human potential for transcending experiences. The early feeding experience can thus be viewed as the first playground of interaction that allows for an attitude of trust to develop in the child. It is this attitude which allows him to take risks in his own venturing, and fosters the development of mind/body intellect, which I elborate on later. Perhaps, then, Ainsworth's criticism of Freud can be disregarded, since I am suggesting that it is the feeding situation that lays the foundation for the possible attainment of full humanness.

The theory that I have found most useful has been the ethological model of Bowlby and Ainsworth which

> does not consist of a tight series of propositions in the mathematico-physical tradition ... (It is) an open ended theory, intended both to help us understand research findings to date and to provide guidelines for future research. The theory is clearly open to extension, modification and refinement in the light of research findings. (Ainsworth, 1978, pp. 436-468)

Bowlby proposes that at birth modern infants manifest the "vestiges of behaviour patterns that played a role in maintaining contact with caretakers earlier in the evolution of man" (Rajecki, et al., 1978). These

include certain reflexes (such as Moro, traction and grasp) and important signalling processes (such as crying, babbling and smiling). Bowlby and Ainsworth argue that adults too, are biologically predisposed to assure proximity to and protection of the infant, and that though they don't have to respond to the infant's eliciting behaviour, the quality and appropriateness of their response influences the security of the resulting relationship.

Pearce's Holographic Model

These two features of Bowlby's and Ainsworth's theory are foundational in Pearce's (1980) elaboration of a holographic, biopsychosocial model of early infant development which follows.

The infant's mind/brain, it seems, has been designed for astonishing capacities, but its development is based on the infant and the child constructing a knowledge of the world as it actually is. Pearce maintains that children cannot do this because we unknowingly inflict on them an anxiety-conditioned view of the world.

Piaget (Pines, 1974/75) too has argued that the infant is driven from within with a non-volitional intent, to make the necessary interactions with the world and thus build up his own "structure of knowledge" (or world view). At birth the brain, as a hologram fragment must have exposure to, and interact with, the earth hologram to achieve clarity, so to speak. Theoretically the smaller the hologram fragment the more blurred is the 'total picture' within it: the interaction mentioned above is therefore necessary to clarify the 'picture'.

Body Movement as a Basis for Holistic Growth

Pearce sees the child's long period of development as necessary

for transfering information from the old brain system to the new. He along with Bowlby, suggests that the old brain system carries the information and abilities of the earth's history -- and this is vast. The new unprogrammed brain must structure the "content in potentia" of the old brain system to produce conscious and flexible action with eventual creativity resulting.[1] This transfer takes place initially through the child's non-imitative movement which is initially organized by the old brain system.

> These physical interactions with the world bring about a simultaneous patterning of that particular experience in the infant-child's new brain system. (Pearce, 1980, p. 11)

(Piaget would refer to this as the sensory motor stage of development.)

The ability for abstract thought develops <u>through</u> concreteness. In other words, the child's <u>movement</u> in exploring his world is what initially allows his intelligence, his ability to interact and move from the known to the unknown, to develop. Intelligence must first be educated in full and accurate interaction with the earth, <u>as it is</u>, so that the child can develop "body knowing" or "muscular mindedness".

Even something like speech, which at first consideration seems to be remote from movement, has been found to be intimately connected with it. In 1974 Condon and Sander found that the so-called random movements of new-born babies immediately co-ordinated with speech when speech was used around the infant, and that each infant had a complete and individual repetoire of body movements that synchronized with speech. Babies show a predisposition to behave in a social manner: they do not simply react with others (Bower, 1977). When they studied

older children and then adults they found the patterns of synchronization to be universal and permanent, even though instrumentation was needed to detect it by adulthood.

Although young babies are surely not "conscious" of this interconnection between body awareness and mind/brain awareness, it may be that if adults had not lost their receptivity towards their own mind/body connection they would have abilities that we now consider strange. For instance, Tart (1966) found in some of his telepathic experiments that a person's body (A) could be aware of another person (B) being shocked, even though A, as a conscious person, was not aware of it. Einstein too, claimed that the first intimations of an important truth would first come to him through a muscular twinge or internal visceral sensation (Pearce, 1980). These two examples suggest that if adults were more aware of their body knowing they would have abilities that we now relegate to the exotic realm of "extra sensory perception". These examples also make sense when considered in the light of Aurobindo's fourth personal quality necessary for transpersonal consciousness -- perfected intelligence dependent, in large part on mind/body unity (See page 40).

Balance in Exploration

Intellectual crippling occurs when there is no balance in the exploration of the known to the unknown. Adults bring this about in children either by blocking the child from interacting concretely with unknown, actual things, or by pushing him into inappropriate 'too much, too soon' experience.

An example of appropriate responding, where mothers were sensitive

to their babies responses, can be seen in a delightful, but simple micro-analysis by Richards of babies and mothers smiling at each other. He found two things:

> First, the infant's behaviour in this situation goes through a definite sequence: he would, for example, be quietly attentive while the mother smiled, he would then gradually become more and more active, pumping himself up as it were, and at the point of maximum "pumpedupness" he would pause a moment -- and then he would smile.

The second thing Richards found was that

> what the mother did during this time had to be carefully phased to the infant's behaviour ... At the point of maximum 'pumpedupness' the mother for her part should stop all activity, giving the infant time, so to speak, to smile. If she did not do so, if instead she continued to bombard the infant with stimuli in an inphased fashion, then the child would become tense and eventually begin to cry instead of smile. (Schaffer, 1974, pp. 211-212)

From an example like this it is possible to see that anxiety and tension result when a child is forced into unmatched relating of his 'internal' intent with 'external' content. It is interesting to speculate as to the mother's motivational attributes in the over-stimulation situation. Would she be striving hard, albeit inappropriately, to convince herself and her 'significant others' that she is a super-mum by giving her child so much attention? Self confidence in relaxed mothering is difficult to achieve in our society, and I shall be commenting more on this later.

However, if the child <u>generally</u> finds himself in an environment that elicits anxiety for him in the way described, then interchange with his matrix of relationship and the growth of his 'personal power' break down. Anything that implies hostility will be rejected by the infant,

if possible (Pearce, 1975). Unfortunately, the sequential unfolding of maturation goes right ahead. The child's ability to interact fully with his 'environment' falls more and more behind, and thus more and more energy must go into compensation. Eventually there is a break in the mind/brain/body balance, with an accompanying loss of the feeling of personal power that could have been maintained in an environment where the child is 'appropriately met half way'.

The rhythm of intellectual growth can be described as pulsating between stress-movement into the unknown, unpredictable; and relaxation - assimilating or digesting that unknown back into the known. (Piaget's terms for these processes are accommodation and assimilation, respectively.) This pulsating rhythm is a feature of mind/brain and 'muscular mindedness'. It can perhaps best be described as the "free becoming of being" (Anderson, 1978). It is what leads to a sense of personal power and ability to experience joy, but its foundation must be from a firm matrix. In other words, in the early months, the mother's ability to respond empathetically to her child's emerging hologram fraction is of utmost importance. It is the matrix of 'mother' that allows the child a safe place in which to 'stand' and to which to return, and from which to make venturesome sallies into the unknown.

The Period of Bonding

Having made general statements about child development and the quality of adult/child interaction that seems most appropriate to harmonious, balanced development it is important to look more closely at the earliest period of a child's extra-uterine life.

It is well known that when in the matrix of the uterus the baby is

affected very directly by the mother's state of well being. Alcohol, nicotine and any other drugs pass through the placenta into the baby's blood stream. If the mother is tense the imbalance of her hormonal system is also 'transferred' to the child -- with disasterous results if the mother is chronically tense (see Chapter IV). Since the baby is born with movements that can co-ordinate with speech it seems more than likely that the infant in utero is responding to sound, and learning some very fundamental elements for full rhythmic interaction with his world.

The emergence of the child from the 'womb matrix of exploration' to the 'mother matrix of exploration' has received considerable attention in recent years. The traditional sterile, drugged and mechanized birthings of North America, in particular, have been challenged as not providing the optimum environment for the new family to 'bond' together (Arms, 1975). 'New' ways of allowing birth and bonding to proceed are being developed.[2] But, important though these developments are, I do not want to spend time discussing them each, but rather prefer to try to extrapolate some of the pertinent, underlying values and life-style issues by reference to one particular study.

A Cross Cultural Study of Bonding

In 1956 Marcelle Geber, with funding from the United Nation's Children Fund, studied the effects of malnutrition on infant and child intelligence in Kenya and Uganda. She found that for the first four years of life the children she observed were more precocious, brilliant and advanced than American and European children. (Why they loose that advantage is a separate issue.) These infants smiled continuously and rapturously from at least the fourth day of their lives. Blood analysis

showed that all the adrenal steriods connected with, and essential for, coping with the stress of birth were totally absent by the fourth day after birth.[3] The infants were awake most of the time, virtually never cried, and at two days of age they could sit bolt upright, held only by their forearms with straight backs, perfect head balance and finely focused eyes staring intently at their mothers.

In discussion I have heard it suggested that the observations Geber made were invalid because she was using old North American norms that would not have then even applied to N.A. babies. This argument may have been strong enough to dismiss her study if it were not for the fact that there was a second section to it. (She was granted a year's extension of funding.) At that time new European-type hospitals were being erected in Uganda where upper class Ugandan women had their babies and followed similar procedures and schedules to American and European hospitals. Here Geber found that these babies did not smile for two and a half months, and showed none of the precocious sensory-motor learning of the other group. Blood analysis showed that high levels of adrenal steroids connected with birth stress were still prevalent at two and a half months. The infants slept a great deal, cried a lot, and were colicky and frail. These were all behaviours and observations that would be more normally expected in North America.

This study would seem to suggest that, rather than there being a racial propensity towards early precocity, it was the 'treatment' surrounding the new mother/child dyads that brought about the differences. In the first case, the infants were born at home, generally delivered by mother after a period of labour of about one hour. The child was constantly with the mother who sant to, massaged and caressed

the child constantly. The mother carried her unswaddled infant next to her bare breast continuously and the infant fed frequently on his own schedule. The mother responded to the child's every gesture so that every move the child initiated ended in success. (Other examples of mother's sensitivity to her child's needs have been documented by Pearce, 1980).

Pearce describes what happened to the second group thus:

> the infant was exposed to an intelligence determined to outwit nature, an intelligence distrustful of anything natural, an intelligence with a vast array of tools at its disposal with which to outwit and infact, supplant nature entirely. (Pearce, 1980, p. 113)

In fact for this group the pulsating rhythm of mutual learning and interaction had been violated and it appears as though the results were profound indeed.

Technologized births, with the use of drugs to dull pain, also eliminate muscular coordination, and fully 'conscious' anxiety-free delivery. Suzanne Arms points out that such births also become delayed, The baby normally produces adrenal steroids to prepare his body for the stress of a new learning situation, only to have it postponed. And so his body continues to pour out hormones. With the delays mother and baby are kept at a climactic point of tension, unable to achieve resolution. When the child is eventually 'delivered' the dyad is too tired and unresponsive to nurture each other as they should. The mother cannot massage and stimulate the baby's body to reduce its high-stress state; the baby is in no fit state to respond fully to his parents. The Ugandan mothers of the first group, on the other hand, constantly stimulated the child's body thus activating his sensory systems and reticular formation rapidly. With a fully functional

sensory system and a fully functional reticular formation to coordinate mind/brain/body information processing and muscular responses, intelligence has clear sailing. In furnishing the bonding needs these other needs have also been subsumed.

The compounded-stress situation of technologized births possibly gives rise to the fact that our newborns sleep a great deal and cry a lot when wakened. For Pearce this

> Lack of physical stimulation at birth has resulted in a failure of the reticular formation completion. Then sensory information cannot be processed properly, and sensory intake creates confusion and anxiety ... The combination of unrelieved birth stress and inability to assimilate and cope with sensory intake reinforce each other, they continue the flight-fight effect and adrenal overload, making the wake state intolerable. (Pearce, 1980, p. 68)

The Body Intellect and Creativity

Research suggests that human bonding is crucial for healthy development. It can be seen as a 'primary processing' -- a biological function of enormous practical value (Klaus, 1970). It allows for the development of 'body knowing' -- a trusting that involves a kind of 'surrender'. Bonding is a psychobiological state that unifies the total mind/brain/body system of the child. It allows for the initial birth excitement to be converted into relaxation and joy and leads to the type of autonomy where the child learns that the world matrix meets him half way and augments his energy with its own. This means that it is likely that the world can never be conceived, by a 'bonded' individual, as inert matter that we can simply 'do to', and finally violate. Instead the world and man will tend to be viewed in a relationship of reciprocity.

In addition, bonding provides a solid formation for rational thought by unifying the mind/body continuum, and allowing the child to experience the deep satisfaction of having given up the known life matrix (of the uterus) for a greater life, in such a way that his basic attitude is one of trust.

The bonded intellect implies a kind of trust in the self and a trust in the world. It allows for courtesy or respectfulness towards problems, materials, situations or other people. It shows a kind of deference (yielding, surrender) to the authority of the 'facts', to the law of the situation (Maslow, 1977).

In addition, the bonded intellect is more likely to allow for creativity since it is supported by a personal sense of stability that allows for the dissolution of the ego which appears to be a necessary prerequisite for creativity. The ability to become 'lost in the present', to be fused with the reality being observed, whilst maintaining the centre of individual awareness, seems to be a sine qua non for creativeness of any kind. Good problem-solving and creativity require that the individual be able to take another's perspective and also be 'reality'oriented. To be open to 'otherness' paradoxically demand the receptive mode with its physiological counterpart of the 'relaxation response' that allows us to transcend our own world view. This is difficult! It is particularly difficult in the light of Bateson's recommendation (see Chapter II, page 13) that the creative researcher needs also to hold stubbornly to his epistemological assertions in order to create enough tension between them and his data to allow for true originality to arise. A delicate balance dependent on mind/body knowing is required.

In a sense 'allowing', the feminine aspect or 'valley spirit' of the Tao, is supreme, because the receptive/assimilative mode is the only ground from which assertion, as figure and individuality can show itself. A groundless figure is inconceivable (Joan Novosel-Beittel, 1979). Since assertion is necessary for creativity its dependence on the receptive is important. To be appropriate and truly creative assertion must be 'grounded'.

If on the other hand, the intellect can never get past the need for primal bonding there will be a constant search for a matrix of security from which to explore. There will therefore never be the possibility of sheer joyous exploration of possibilities -- only curbed exploration with ulterior motives -- perhaps of finding security, of proving oneself or one's point in one way or another. This type of exploration is essentially concerned with creating buffers between it and the reality of nature in a frantic attempt to maintain the illusion of personal stability, within a non-changing world. A non-bonded intellect will be much more likely to create only hierarchical abstractions merely to maintain a distance between the individual and concrete reality -- even though the latter is, of necessity, always in a state of flux! A bonded intellect, on the other hand, can flow with nature and "transform the given through higher forms of creative logic (that unfold) (Pearce, 1975), even though, paradoxically, there is no urge to change or manipulate reality. This type of personal power is not concerned with mastery over the physical world because there is no individualistic self consciousness. That is, the individual is not constantly perceived as separate from the world (Greenfield and Bruner, 1969). The person is more likely to allow for the 'disappearance' of

the ego and the subsequent possibility of experiencing the 'numinous' and inter-connectedness.

The quality of allowing for creative interaction, made possible by a bonded intellect, is almost impossible for us to conceive of, for the very reason that true bonding runs counter to every facet of our acculturation (Pearce, 1980, 1975; Murphy, 1976; Schumaker, 1973).

Of course, the dehumanization of children does not stop at infancy. In reviewing three early 1970 books on children, Henry Ebel (1976) quotes Kessen, a developmental psychologist at Yale, who observed first graders from New Haven Schools that draw heavily from upper-income families. He found firstly, that children often solved problems not by concentrating on the material at hand, but by looking for cues in the teachers' demeanor. From my perspective this implies that they were removed from important aspects of the concrete reality of their problem and could not loose themselves in exploration. They could not explore from a secure base of the receptive mode.

Secondly, there was a high level of anxiety in the class manifest in nervous tics, overt anxiety attacks and squirming, from all achievement levels. Again this would suggest states of chronic tension that would militate against free learning and joy.

Thirdly, the first graders not only wanted to know if they were doing well, but also how much better than their peers! From my perspective this implies that they already saw themselves in a hierarchically, competetively organized society where the ego must always be defensively at the ready.

Kessen suggested that this behaviour was due to the

> intense pressure from their homes to cease being — as soon as possible — so nauseatingly

> childlike, so disgustingly spontaneous, feeling and uncompetitive, so altogether unlike a 40 year old bank vice-president. (Ebel, 1976, p. 408)

The Non-bonded 'Intellect' of 'Academic Psychology'

Psychologists too function within the reigning paradigm that can be seen as promoting chronic stress, distancing of concrete reality through the implementation of a variety of hierarchical systems, and so on. Piaget is perhaps the most distinguished psychologist of the times and certainly his openness to children has allowed us to gain new insights into their natures. However, even his conception of cognition has been criticized as clearly within the bourgeois, elitist tradition of Kant (Buck-Morss, 1975). Generally, reflecting Kant's bourgeois asceticism that expresses a fear of sensous matter and a consequent desire to dominate it. For instance, Piaget describes the child's first cognitive leap as developing 'object permanence' -- a prototypical experience of alienation where the subject can be divorced for the object, and this approach can be seen as a building block to a dualistic view of the world -- where man and 'objects' are separated. That is, 'progress' made by the child is judged by the loss of his ability to identify completely with objects, to 'loose himself' in their apprehension.

Secondly, when a child can do formal operations 'in his head', when he can divorce theory from practice, again leaving concrete 'reality' to ascend hierarchical abstractions, Piaget considers him to have reached the culmination of learning!

Summary

This chapter has been an attempt to elucidate how parents in our society will be likely to introduce their very young children to a

stressful environment. This in turn forces children into positions of endeavouring to avoid a noxious, stressful reality by escaping to hierarchical systems of abstraction. This is coupled with a tacit denial of 'body-knowing' through bracing, and an inflation of the ego. The ego, not being centred in body knowing, is really in too precarious a position to allow for its transcendence. And yet it is only this transcendence that allows for good problem solving, creativity and healing. Moreover, we are in a poor position to perceive the subtleties of these stress-induced processes. This is because most of our present psychology is formulated within a stress-produced and stress-inducing perspective.

Notes

1. This idea presents a possible resolution of the traditional nature/nuture debate of developmental psychology.

2. Some of these 'new' approaches to birthing are being evaluated as if they were 'methods'. Instead they are processes arising out of different value systems than those normally surrounding birth in North America; thus, when evaluated traditionally, these methods may be found wanting. For instance, Nancy Nelson and colleagues at McMaster University Medical Centre in Hamilton, Ontario, did such a study to evaluate the Leboyer's 'method' of giving birth and found no significant difference between the experimental and control groups. Raymond Duff (1980), a physician at Yale University School of Medicine, criticizes this evaluation saying that "Life may be so complex that much meaning is lost in oversimplifying it as the science of Nelson and her colleagues".

3. The issue of whether young babies smile or not is extremely interesting, and should be born in mind when considering Geber's work. Notable researchers, including Burton White, Spitz, Katherine Bridges and even Bruner, have said that infants do not smile for 10 to 12 weeks after birth because their 'intelligence' was not developed enough. This 'known' fact has been disputed by Emde and Harrison who, according to Schaffer, (1974), were prepared to stand back and observe what actually happens when the child is left to his own devices, rather than be clouded by their concepts of what happens. They have established that smiling is spontaneous, non elicited activity and can be seen from birth on. It appears in regular rhythms, takes place in bursts rather like spontaneous sucking. It is generally found in association with particular E.E.G. patterns and specific arousal states. In short, it bears all the hallmarks of an endogenously organized response which diminishes about the fifth or sixth month until it becomes a rarity.

> By that time smiling has become closely linked to certain classes of environmental stimuli, and it is this transition from an endogenous to an exogenous pattern that must be of interest to students of the socialization process. (Schaffer, 1974)

This offers another example of how spontaneous, intended body movement on the part of the child propels him into learning. Most parents want to see those smiles and will respond in as appropriate way as possible for them.

Emde and Harrison say that the smile can be seen from birth on. They do not say whether there are variations. Although Geber's work suggests that there are variations it would be important to know details of such. For example, if stressed babies smile less (as suggested by Geber) then this could interfere with the

bonding process since the relative absence of smiles would not be as stimulating to parents. In addition, with reference to Richard's work on smiling referred to earlier in this chapter (IV) it seems likely that anxious mothers would be more likely to react inappropriately to baby's 'smiling behaviour' and catapult the baby into a state of tension and agitation.

In sum, it is conceivable that smiling could be a good measure of the infant's state of relaxation and is perhaps worth more careful consideration in this respect.

CHAPTER V

BREASTFEEDING AND ITS ROLE IN 'BONDING FOR FULL HUMANITY'

It seems highly likely that breastfeeding is intimately connected with bonding. In addition to the body stimulation as previously outlined, Zaslow and Berger (1969) have pointed out four great needs for bonding to occur, and breastfeeding can furnish them all at once. (This is not meant to imply that bottle feeding does not satisfy these needs necessarily: only that perhaps it is more difficult to do so.) (This is discussed later in more detail.)

Firstly, there is the need for holding, with the mother's body molding to that of the infant's. Secondly, prolonged and steady eye contact; thirdly, smiling, and finally, soothing sounds.

Back in 1955 Niles Newton pointed out that it was inaccurate to state that bottle feeding is nearly the same as breast feeding so long as the mother holds her baby whilst feeding him. Because the mother's and baby's bodies are involved in the process a different kind of relationship is inevitable. Quantities of prolactin are produced in the mother during breastfeeding, and although little is known about the effects of this hormone on humans, in animals it is known to facilitate maternal behaviour (Sherman, 1971). During breastfeeding oxytocin acts on the uterus causing contractions for up to twenty minutes after a feeding, thus helping to counteract uterine hemorrhage and aiding the involution of the uterus. The crying of the infant can trigger the release of oxytocin in the mother which leads to nipple erection. The stimulation of the nipple and the mother's need for the baby to provide physical relief by emptying the breast are additional factors which make

breastfeeding a special experience. This may contribute to, and be the result of, the learned pleasure of relationship.

Problems of Breastfeeding

However, breastfeeding cannot be regarded as a panacea for guaranteeing successful mothering which demands sensitivity and reciprocity in relationship. Julia Sherman (1971) has documented those studies which have shown that breastfeeding is not successful when seen merely as a 'technique', rather than as a 'whole-some' outgrowth of a value and life-style system.

Unfortunately, in a society that is geared to 'outwitting nature' and that has developed an amazing number of tools and methodologies to accomplish this, it is extremely difficult for men and women to apprehend approaching a task with anything other than a specific tool or methodology. In his commentary on The Secret of the Golden Flower, Jung (1962) refers to the ancient Chinese saying that

> if the wrong man uses the right means the right means works in the wrong way.

Jung goes on to explain thus:

> This Chinese saying, unfortunately all too true, stands in sharp contrast to our belief in the 'right' method irrespective of the man who applies it. In reality, everything depends on the man and little or nothing on the method. For the method is merely the path, the direction taken by the man. The way he acts is the true expression of his nature. If it ceases to be this, then the method is nothing more than an affectation, something artificially added, rootless and sapless, serving only the illigitimate goal of self-deception. It becomes a means of fooling oneself and of evading what may perhaps be the implacable law of one's being. (Wilhelm, & Jung, 1962, p. 83)

An inability to appreciate this difference between 'using'

breastfeeding as a 'technique' and 'allowing' breastfeeding to develop as a natural outgrowth of inter-relatedness on many levels, would prevent an understanding of some of the difficulties a breastfeeding mother may experience. It might also lead to a misevaluation of the situation. For instance, Blurton Jones (1972) has pointed out that breastfed babies cry more in the first year of their life than bottle fed babies but thereafter cry less -- in our society. This could well be due to the fact that breastfeeding does establish some bonds and that the child is struggling to maintain them. The child has developed some rudimentary sense of 'personal power' since he has experiences himself as an active agent in a relationship of 'relative' reciprocity. However, if we were to regard breastfeeding as only a method of 'producing' 'non-crying babies' than Jones' observations would lead us to assume that it was a failed methodology. In fact, the breastfeeding situation represents many delicate interfaces of interaction at many levels. And in an important sense it seems as though babies and young children have an amazing propensity towards wholeness.

Breastfeeding and Anxiety

Breastfeeding in our society can actually be a tumultous experience for a woman which may lead to problems in handling this new learning situation. Harry Stack Sullivan discovered in the 1940's that even though his survival depends on nursing, the infant will actually reject the nipple offered by a severely anxiety-ridden mother (Pearce, 1975).

When there are particular conditions of upheaval in the society breastfeeding dyads appear to suffer sooner than bottlefeeding dyads. Josephine Elkes reported two incidents of this nature to me. Firstly,

the acute suffering of breastfeeding dyads is a well known phenomenon in concentration camps. Josephine heard of the second example from Professor Mannheim of the London School of Economics during World War II. (This was not reported in the journals because of war time conditions.) These were pre-penicillin and sulphonamide days. Therefore, because of the fear of Menningitis spreadying amongst babies and wiping out a whole cohort, mothers with babies of a year or less were asked not to go down into the very congested, London underground air-raid shelters. Home visitors found that it was the breastfeeding mothers and their babies who were most upset by this request, and it was because of their distress that the rule had to be relaxed. It seems that the breastfed babies were refusing to nurse and were constantly screaming, which further upset their mothers who were already terrified of being killed by being exposed to exploding bombs.[1] In personal communication to me, Josephine makes meaning of this phenomenon thus:

> The air raid sirens triggered the alarm response in Mum -- "flight or fight". Since one cannot fight a bomber and London was very, very short on anti-aircraft, Mum's only alternative was 'flight'. If this was denied her, in the presence of real and immediate threat to herself and her infant, she developed a state of acute anxiety which seems to have been sensed by the pre-verbal infant. Mrs. Mannheim speculated that perhaps this was due to changes in the chemistry of the mother's sweat glands, since the breastfed baby's nose is very close to the underarm area of the mother.

Since then, pheremones have been identified as olfactory cues to the limbic system which is involved in the 'flight or fight' response. Furthermore the olefactory/limbic system is relatively active in infancy and it appears as though it is one of the delicate interfaces of mother/child interaction and learning.

So that, rather than seeing breastfeeding as a mere 'tool' or 'technique' it has to be thought of as an interface of the mother's hologram that represents her total life space and reality/self perceptions. Then the 'nervous nipple anomoly' is an anomly no longer. The phenomenon makes perfect sense when seen within the total functioning system. A nervous mother will find it almost impossible to do 'the most natural thing' of nursing her baby -- simply because in our society it is frequently no longer 'the most natural' for mother to relax into nursing her child.

But in addition to the problems of perceiving breastfeeding as methodology, and the 'nervous nipple non-anomoly', there is the additional issue of adults having lost touch with concrete 'reality' mainly as a result of their self- and other-induced chronic anxiety, as outlined earlier. Once primary perceiving has atrophied, the self-system develops a defence against disorientation, novely and surprise, and the individual is tightly locked into social consensus, and theoretical abstractions. Whilst language can "release us from immediacy" (Bruner, 1964) and lead us to our unique human powers of more abstract learning and the ability to "go beyond the information given", it also carries the great danger of separating us from concrete reality.

Under conditions of stress there is less scanning, or looking around at choice points, and thus the path to a goal is learned as "this path to this goal" rather than the more flexible one of "this kind of path to this kind of goal" (Bruner, 1964). In other words under stressful conditions, abstraction is hurried and therefore overgeneralized and more sterile in terms of leading to flexible alternatives. On the other hand, with mild motivation, the most impelling

drive operative is manipulative curiosity which 'grounds' and 'embodies' the enquiry in playful, concrete reality (Bruner, 1975, 1976). Since most adults in our society are stressed into 'wilfully' making decisions based on abstracted 'reality', they will be unprepared for the need for the flexible, reciprocal interchange required for growing with a baby. This predisposition will affect the breastfeeding situation, and make it unlikely that a flexible orientation towards it will be accepted. The nursing scene is more likely to be stressfully and narrowly conceived as a 'method' leading to a specific, and frequently inappropriate, goal.

Questioning the Role of 'Mother'

One of the most important issues facing potential breastfeeding mothers today is that of creatively redefining themselves and their roles at an important time in their personal developmental histories within their Western culture's history. Grauman (1975) has suggested that the core conceptual confusion of humanistic psychology revolves around the issue of conceiving of human nature as "residing in the interior of an individualistically conceived personality ready to be 'actualized' or 'evolved' in encounter with humanists." Grauman and other phenomenologists believe that 'human nature' must be looked for in the dialectical interactions between men and their concrete social environments. Since women are defining themselves in the context of 'interactions' it is important to place this study of breastfeeding into its political, social and historical context, in order to try to make explicit what Merleau-Ponty (1963) called its "human dialectic".

Although breastfeeding has been increasing in the last decade in western societies (Jack, 1980), it would possibly be hard for many women to associate with it in the way I have talked about because it

would seem to require so much time and attention from them, and many women now would rather free themselves for "outside" work of a different nature.

Recent scholars delving into European history, are claiming that western parents were amazingly callous towards their young (Aries). Parisian scholar, Elizabeth Badingter argues that the 'maternal instinct' is just a myth invented 200 years ago to subjugate women (Leo, 1980). Like some feminists today, most urban women of the period shunned the role of mother and sent babies to the country to wet nurses in order to increase their own social and economic status, and thus breastfeeding went out of fashion.

Badingter explains that women gained no glory from being mothers and therefore that those who could, opened up salons and helped create a new civility and elitist culture in which women were the most active element. She further explains that breastfeeding became popular again when 'offspring' were needed as laborers and cannon fodder in the industrial era. It is true that the political climate with respect to mothers and children has not always been good. That is still true today. For example, breastfeeding can be seen as a delicate political issue since on a global scale breastfeeding averts more pregnancies than all family planning services put together, reports the French agronomist Rene Dumont (Jack, 1980). Also, protein deficiency (from refined white rice) results in a reduction or loss of the liver's ability to inactivate estrogens.; the excess of estrogens increases the woman's fertility. For women on a poor diet and little access to birth control this is a crucial issue.

Breastfeeding has become a <u>visible</u> political issue in North America.

Mothers who breastfeed generally opt to stay at home. Our society is so anti-family that parents have to accept poverty for the sake of having a large family. Robert Mendelsohn considers this to be "an obscene trade-off" (Goldman & Jacobs, 1980).

However, I have shown that maternal 'response-ability' as responsiveness (I prefer these terms to 'instinct') to be the result of delicate interchanges of energy and fairly easily over-ridden by cultural and situational influences. Maternal interest is known to decline sharply if the child is removed from the mother in the first few days after birth, as was the case with the urban women of earlier days that Badinter writes about (Leo, 1980).

Repression of 'The Feminine' -- Introduction

In Chapter II, I talked about the demise of women, and their holistic approach to childbirth, going hand in hand with the aggrandisement of 'the masculine' and 'tool wielding professionals'. I now want to consider the negation of 'the feminine' from two other perspectives. The first perspective relates to how the nurturing aspect of 'the feminine' is not valued in the external reality of inter-psychic relationships between men and women. The second perspective relates to the difficulty women experience in valuing their nurturing intra-psychic 'reality'. I have shown earlier that we can no longer systematically differentiate between 'inner' and 'outer' realities: thus it is not surprising to find intra-psychic experiences mirroring external relationships, and vice verse.

Societal Repression of 'The Feminine'

The feminine I refer to is not the trite, seductive aspect of

womankind that is flaunted and taunted in our society: that is just the heterosexual element of the feminine. In societies where this aspect of woman is of prime value, or is rather undervalued, women are essentially seen as men's sexual partners. In this context they are always the subservient ones in a hierarchical society (Johnson, 1977). This is predominantly the case in our society.

Schaffer (1974) has described the way a woman looks at her baby as if she were gazing at a lover. This implies that the father would have to be very confident of himself and his relationship with the woman, or he will surely sabotage the breastfeeding situation. It also implies that the woman must be confident of her sexuality and nurturing abilities. This is not easy in our society where breasts tend to be viewed as 'sexual' rather than 'nurturing' organs. Perhaps this societal attribute has been elicited by much of our art which is predominantly executed and taught by males. The work of great artists influences what we see of our world. For instance, when Cezanne first exhibited in Paris people did not recognize people in his impressionistic drawings. Only over time could people see bathing figures (Foss, 1971). Similarly, one wonders how our views of nursing, traditionally painted by men, have affected us. Snyder-Ott (1978) compared the work 'mother and child' by Renoir and Mary Cassatt. Quoting from a letter of Renoir's to his poet friend, Snyder-Ott shows how his comments certainly do not reflect the idea of respect and equality and love for women. She then examines three of Renoir's paintings and numerous drawings of Renoir's wife, Aline, nursing their son Pierre.

> In each painting, Renoir focuses on his wife's exposed breast and the little boy's naked lower

> half. Aline gazes at the painter. She is not depicted as emotionally involved with little Pierre; Renoir paints his wife as a passive, decorative fruitcake, gazing soulfully at the artist. (Snyder-Ott, 1978, p. 11)

Mary Cassatt's mothers and children, on the other hand, are depicted as actively involved with each other. Mothers are caring for, nursing and engaged with, and generally portrayed as emotionally involved with their children.

It is the maternal, nurturing aspect of the feminine that is generally repressed in our society and there are good reasons for this -- it heralds the total loss of male supremacy! In matrifocal societies the mothering role is seen as powerful, independent and unlike the wife role. The women are not necessarily relegated to home but have important roles in the community. Their difference and importance lies in the fact that they can bear children. And it may be that the bearing of children (either literally or symbolically) is the best way of defining the feminine since the biological role is quite distinct from the cultural role of the feminine (Breen, 1975).

Some writers consider that the original human family unit may have been women and children, with men more loosely attached to the group. Johnson (1977) argues that true matriarchies where women dominate men have not been found because dominant relationships are part of a masculine paradigm, not a feminine one. In matrifocal societies androg nous relationships are the norm, where there is a lack of differentiation between sexes with respect to attitudes, behaviours, traits roles and status. Both sexes are seen more in human terms, there is greater participation of the male in child rearing, and males are not viewed principally as providers. Moreover, in matrifocal

societies there tend to be distinct ties to the soil. Mothers with babies and young children are not so free to roam. If you stay in one place you are more inclined to value it: plundering the earth would eventually lead to your demise (Slater, 1974). Therefore matrifocal societies would appear to be less prone to self-destruct.

Recent studies question older analyses, that were executed within the terms of a male paradigm, and that concluded that matrifocality was pathological for males (Johnson, 1977). Certainly a matrifocal society is not one in which men will be constrained to 'get ahead' but will rather be encouraged to be nurturers. This emphasis may present a man in our society with a personal dilemma.

Of course, for a truly androgynous society to exist men and women will require a power base outside the home, and men will require opportunities to participate more in child rearing. Both these moves necessitate a restructuring of the economic and occupational worlds.

The Intra-Psychic Repression of the Feminine

But it is not just these 'external' societal issues that bear consideration; it is also the intra-psychic issues of individual women that are important. Julia Sherman (1971) has listed studies which conclude that "conflict with heterosexual needs has been underrated as a source of resistance to breastfeeding" and she suggested that our erotic culture makes it hard for women to identify with the 'madonna figure' of a more matrifocal society. There is a physiological base for conflict between the maternal and heterosexual roles, since lactating women have low estrogen counts which would tend to weaken their physiological sexual response. It seems likely that woman would

naturally move into a state of maternal pre-occupation. But if by doing this she tacitly upsets the status quo she will probably tend to stop breastfeeding in order to maintain the stability of her world view and self perception. She may develop physical reasons for not continuing (Sherman, 1971).

In this connection I have found women to frequently state that they feel uncomfortable with any sexual arousal that may accompany nursing. Oxytocin is involved in human sexual orgasm and the presence of oxytocin, brought about by the infant's sucking, may account for the ready sexual arousal during nursing (Sherman, 1971). Conversely, intercourse may result in the inadvertent production of a stream of milk. In discussion one woman told me that because of this experience she could never conceive of breastfeeding as eliciting the relaxation response. Her comments suggested to me both an unfamiliarity with the ebb and flow of stress/relaxation which is characteristic of a balanced and poised organism, a discomfort with fluctuating somatic sensations and perhaps a limited view of sexuality as being only 'doing' and not relaxation. Certainly it would appear that she felt the need to compartmentalize somatic/emotional states and thereby separate out different aspects of the feminine.

The difficulty of identifying with the madonna figure, however, is probably not just because of society's over-identification with heterosexuality. The difficulty is compounded by our society's ignorance of the full nature of the madonna. For us, the dark side or the 'black madonna' has been systematically obliterated -- even in Europe -- with the result that we over identify with the meek, sweetness or nurturance (if we identify with the madonna figure at all) which thereby becomes sickly sweet and cloying on the surface. (In Chapter II,

page I referred to the witch hunts which in part led to our present imbalance). This imbalance means that the 'negative' or dark side intrudes in unsolicited, and therefore inappropriate and harmful ways. Other societies have not lost this particular balance. For instance, in India the goddess Kali has her benign and fearsome attributes acknowledged and so 'sweetness' and 'awe-full-ness' are held in paradoxical poise. Of course, a woman does not have to consciously acknowledge one or even both aspects of the madonna in order to be influenced by the pervading, unspoken attributes of her society.

Rediscovery of the Sanctification of the Body

The body/mind is a continuum that we neglect to our peril and then, inadvertently, pass this neglect to our children through our inability to see and sense through our conceptual fog.

Jung said, as early as 1933, that

> if we can reconcile ourselves with the mysterious truth that spirit is the living body seen from within, and the body the outer manifestation of the living spirit -- the two really being one -- then we can understand why it is that the attempt to transcend the present level of consciousness must give its due to the body. (Jung, 1933, p. 479)

When the state of feminine consciousness is immature in man, woman or society (that is, when the puella is dominant), spirit and nature are diametrically opposed, seen as incompatible, and inevitably competing with each other.

> Images and urges of a spiritual nature which would prefer to soar unfettered by the earth are obliged by the feminine Eros principle to become related to personal concrete reality. If the ego is too far removed from such reality it will experience the encounter with the feminine as a paralyzing crash to earth. (Edinger, 1974, p. 278)

But paradoxically, it is the feminine, or moon aspect of the Self which

> brings wild, free but undisciplined urges into relation with reality and into submission to the transpersonal totality of the personality. It is the taming of wild willfullness which thinks it is sufficient unto itself. (Edinger 1974, p. 281)

In perceiving 'nursing a child' as a family developmental task I am suggesting that the parents may have to re-experience the feminine with true matrifocal, somatic appreciation. Acceptance of biological femininity starts with pregnancy. Normal early pregnancy can be viewed as a state of conflict, producing a rise in steroids and histamine. These drop off as "psychological defences are successfully instituted" (Breen, 1975). Jean Hanford (1968) maintains that a woman who cannot respond adequately to this natural conflict suffers from

> irregular patterning of levels of corticosteroids in the blood, indicative of difficulty in adjustment, (that will) lead to such disturbances as spontaneous abortion, prematurity, foetal malfunctioning, etc. (Breen, 1975, p. 53)

Appreciation and acceptance of somatic matrifocality continues into the nursing period. Newton and Newton (1950) noted three possible psychosomatic processes influencing the course of lactation. Firstly, the woman who is doubtful about breastfeeding probably allows less sucking stimulation at each feed.[2] This idea was supported by the fact that the negative group used nipple shields more often. Secondly, pain, fear and emotion have been shown to inhibit the let-down reflex. Experiencing the sensation itself would be anxiety producing to a woman out of touch with her body. Thirdly, the precursor of milk is the blood stream, and blood flow is very sensitive to emotional stimulation through

vasoconstriction and vasodilation. There is also the consideration that a woman ill at east with her body, doubting the quality of her ability to mother through the quality of her milk, will handle her baby in a clumsy way and present her nipple so awkwardly that the baby will reject it (Salzberger-Wittenberg, 1970).

But somatic appreciation of the feminine is not automatically an attribute of a woman in western society. This is because it is likely she has been socialized away from that unifying capacity of perceiving the world as benign in that it meets you halfway. If as a child the woman was not allowed to live her own spontaneous rhythms she will be likely to develop a "petrifying fear of the power of her own instincts because she is cut off from her own inner Being, and is therefore cut off from the reality of life." Marion Woodman (1980) described the resultant woman as one who

> simply does not comprehend the feminine principle. For her 'being receptive' means surrendering control, opening herself to Fate, and plummeting through chaotic darkness into an abyss that has no bottom. No loving arms will open to receive her as she falls. Therefore she dare not surrender to Life -- the consequences could be fatal. Better to keep control by remaining silent and acting out the roles of daughter, wife and mother as she has always half-heartedly understood them. (p. 96)

In fact by denying Life the woman may be making the only choice she can. Assuming a 'reality' orientation is a risky process -- for it is not a life based on illusion:

> To yield to the Great Goddess is to accept life as it is: winter today, Spring tomorrow, cruelty juxtaposed with beauty, aloneness following love. Yielding is possible only when one knows the arms of the loving mother -- or perhaps the outstretched wings of the Holy Ghost -- are open to enfold the child.

As I have described it, for a mature appreciation of the feminine the Holy Ghost is not conceived of as a separate from soma. The spirit and living body are different 'energies' on a continuum -- not discretely differentiated entities. The ability to elicit the relaxation response can be viewed as allowing for the integration of spirit and body which in turn is the nexus from which true humanity is born. As outlined in Chapter IV, pertinent and valuable 'emergence' can only arise out of the receptive -- the receptive element of the feminine is foundational.

However, the female biological role, as well as being receptive, must also be active, productive and capable of concerted effort (Newton, 1955). Racamier (1967) maintains that a woman who wishes to remain receptive "cannot breastfeed normally for she wishes to be fed more than to feed." For the 'effort' of the somatic feminine to be of a flowing, unified nature it must be seen as the 'figure' arising from the 'ground' of the valley spirit just as is true for any creative act. Marion Woodman poetically describes the woman's developmental task as releasing her own masculine spirit from the womb of the devouring mother (1980).

Perhaps women in certain sections of our society, having allowed themselves to be coerced into passivity, now find themselves in a response of 'blind contingency', -- an unconscious "running the other way", or "enantiodromia" (a term Jung borrowed from Heraclitus) (Campbell, 1976). In this way it seems likely that women are in danger of wholeheartedly, unconsciously embracing the masculine paradigm and avoiding the truly receptive aspects of the feminine. (By doing this, they offer no role model to men trying to develop their own feminine

aspects -- or anima).

Self Conscious Parenting Versus Ego Conscious Parenting

Of course, there is an inherent danger in my laying out this theoretical base since it might be assumed that I wish to imply that all women should 'think their life through' in this hierarchical, abstract and ego conscious manner.

In fact, nothing could be further from the truth, since I have also argued that mere abstractions interfere with flowing with life's experience. Ungrounded abstractions interfere with the 'free' perception of 'inner' and 'outer' realities and therefore could interfere with the parent's relating to the child in an unimpeded, basic, body/minded and appropriate manner. Polanyi (1958) refers to tacit knowing, the knowing that is far deeper than words. Talking about feelings and special events can cause them to become antiseptic and then they loose the depth so necessary for our inner life. Because the development of consciousness is always a risky process that can cut the individual off from his source of renewal, there is always the need to "differentiate between the drive for power and the need for creative perfection" (Woodman, 1980). The need for creative perfection values the receptive and therefore values silence, and the long and necessary incubation period. It is such a drive that would be truly helpful for developing Self consciousness in parenting.

However, many women are struggling with their own consciousness as women and it appears that self-conscious parenting is here to stay (McBride, 1974). A conscious formulation of theory is therefore important -- particularly for those who work with parents. This is not

so that they will coer e others into a particular way of thinking and behaving but more so that they will have some ideas as to the great realm of possibilities for exploration for parents, and an understanding of the complexity of issues that surround a major life-event such as nursing a child. They will then be in a better position to facilitate the kind of learning about this kind of path to this kind of 'solution'. They will be able, in effect, to foster flexible self-consciousness.

Intelligence essentially proceeds from body-knowing, and it can best be fostered in an early reciprocal relationship of mutual learning that allows a basic sense of trust to develop in the child. It is not not easy to translate this knowledge into practice in our fast-paced, technologized society. To attempt to do so can shake individuals and our society at their very roots, so that values, customs and life-styles are open to a new level of scrutiny and re-organization towards mind/body, male/female balance. It is possible to perceive this situation as presenting insurmountable problems if it is viewed from within a non-playful, willfull 'I must change it' perspective. But

> the illusion of conflict becomes real only as we identify with it, believe in it, and become attached to it. The natural state is one of harmony between these illusorily battling opposites, and by giving up our extramarital affair with illusion, we can let the mystic marriage work according to its natural loving design. (Oyle, 1979, p. 56)

Summary

In this chapter I have explored some of the basic differences between bottle feeding and breastfeeding. In doing so I have shown that breastfeeding does not offer a sure-fire 'method' for successful

parenting. It cannot, in fact, be conceived of as a 'methodology' or mere 'technique', and thus it presents problems to our technique-oriented society. In fact, breastfeeding represents the delicate interface of many systems -- and so it can easily be disrupted by chronic or specific conditions of stress and anxiety. One of the present pervasive anxieties -- frequently unarticulated -- is related to current male and female role and expectation changes. This in turn is complicated by our societal undervaluing of matrifocal, somatic aspects of the feminine, that manifests itself both in individual psyches and in 'outer' societal situations.

Notes

1. Pearce (1975) suggests that just as a baby will reject 'an anxiety ridden nipple' in the beginning, the child will later try to reject an anxiety-ridden reality by turning to semantic mediation as a buffer.

2. Sucking stimulates nerve endings that cause the anterior pituitary gland to produce prolactin which acts directly on the breasts to stimulate secretion of milk.

CHAPTER VI

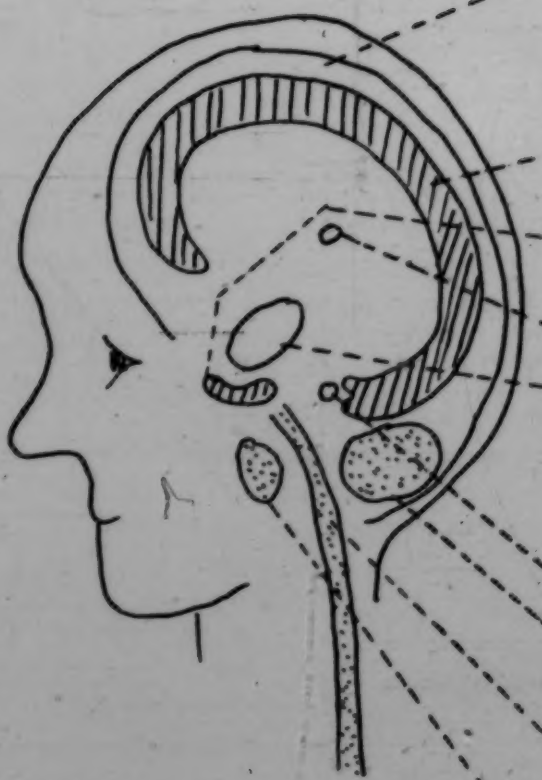
STRESS, PREGNANCY, BIRTH AND BREASTFEEDING

The purpose of this study is to explore some of the many aspects of breastfeeding as elicitor of the relaxation response. So far, I have approached the topic through considerations of the discipline of Behavioural Medicine, of ideas about health and healing, of a holographic model of child development, and of an alternative view of 'the feminine', thus endeavouring to see men and women in their current western social situation.

This following chapter takes a closer look at stress. Part Ia. deals generally with the physiology of stress; Part Ib deals with personality attributes considered important in effective stress management. Part II looks at stress particularly as it relates to the topics of pregnancy and birth -- since it is the handling of these that will also tend to dictate the general mind-set with which parents will approach the breastfeeding situation.

Part Ia. The Physiology of Stress

In Chapter III, I explained that we can no longer consider the brain as eliciting consciousness though it is necessary for consciousness. The brain is involved in a similar way in the individual's dealing with stress. Though individual areas of the brain are associated with specific activities, the brain/mind/body is a wholistic, interactional system. For the sake of simplicity I have used a diagram to refer to areas that are known to connect with responses to stress.



New Brain System

Cerebral cortex - higher order, abstract functions
- 'control' over lower brain

Old Brain System

Limbic cortex - (Latin 'border') regulates basic biological or visceral functions

Hippocampus - "nose brain"

Thalmus

Hypothalamus control of body temperature, hunger, primary activator of A.N.S., regulates pituitary

Diencephalon - regulates emotions

Limbic System

Sub cortex

Pituitary - master gland

Cerebellum - coordination centre for timing and integrating body movement.

Medulla oblogata - regulates heart-beat, respiration rate and dilation of blood vessels

Pons - role in sleep cycle regulation

The Brain's Involvement in the Maintenance of Homeostasis

There are two main connections between new and old brain systems. The first is the sensory motor cortex, a band approximately an inch wide, passing over the top of the head from ear to ear. Secondly, there is the reticular activating system. Pelletier (1977) considers it to be one of the best pieces of neurophysiological evidence for a profound interconnection between mind and body. On the one hand, it allows for purely physical stressors to influence higher thought centres, and for mental or intellectually perceived stressors to generate neurophysiological responses. Also, the reticular activating system is responsible for selecting and screening stimuli from the autonomic nervous system, prior to their being registered in the more 'conscious' (cortical) part of the brain. Our present understanding suggests that the nervous system is a unified, holistic system, and that the reticular system performs a primary integrative function. It's presence helps explain the physiological basis of why abstract world views are connected to stress responses.

The Autonomic Nervous System and Endocrine System

The two primary physiological systems activated by stress are the autonomic nervous system and the endocrine system which are activated by the crucially important hypothalamus. This responds to emotional/physiological stimuli from the limbic system, and intellectually perceived stress stimuli from the cortex.

The Autonomic Nervous system 'controls' involuntary gastro-intestinal, vascular and reproductive activities and operates via visceral reflexes. It mobilizes the body's resources to deal with stressors and consists of two aspects. Firstly, the sympathetic nervous system, responsible for peripheral vascular constriction, usually acts

through a general excitation effect upon neural and glandular functions to produce the body's most comprehensive reaction to stress -- the flight or fight response. Secondly, the parasympathetic nervous system, relatively specific in its action on different organs, is responsible for the dilation of smooth muscles and induces relaxation.

In stress the individual's first reaction is that of the autonomic nervous system to adjust the body to meet new demands, such as a new learning situation. There is a release of adrenalin (epinephrine) from the medulla (centre) of the adrenals which produces a rush of energy. The adrenalin, in conjunction with the hypothalamus affects the pituitary (the queen of glands) which influences all the other endocrine glands and hormones. Corticoids are released from the adrenal cortex. Gluco-corticoids raise blood sugar and inhibit inflammation. (Too little inflammation leaves the individual vulnerable to infection.) Mineralo corticoids increase body retention of sodium chloride and decrease potassium, thus affecting the chemical composition of the body and blood pressure. The mineralo corticoids also promote inflammation. (Too much inflammation is characteristic of the allergic response and it also produces tears in arterial walls which then have to be repaired by cholesterol plaques.)

The immune system is also affected by stress, though at this point we have a very incomplete understanding of this process.

Feedback Loops

Although of necessity I have described these process as if they were linear in their relationship with each other, of course that is not so. And it is here that the concept of the feedback loop helps explain disturbances in the mind/brain/body system (i.e., psycho-somatic

complaints). Any event in the loop can be considered cause or effect, the loop tends to be stable, self-regulatory and, unfortunately, self-amplifying by other physical or mental factors.

Normally what happens when an individual is stressed is that he automatically rebounds to a state of relaxation when he can take appropriate action -- this balancing is referred to a homeostasis. But people with certain characteristics and world views are not able to return to a restful state, and eventually they suffer from a chronic state of tension.

Simeons suggests that our society is such that human beings, still being 'programmed' by the old brain system, tend to be chronically stressed. The subcortex (Old brain system) responds to stress activating the flight or fight response. But, through the censoring activity of the cerebral cortex new brain system, the individual refrains from behaving 'basically' -- he does not act on 'gut reaction', in other words. This apparent lack of response is 'interpreted' by the old brain system as insufficient arousal of the organism to the situation. And so gradually, the individual experiences mounting tension that over time, can weaken the body's defenses and precipitate or predispose the individual to psychosomatic diseases. The old brain system's contributions to homeostasis is thus seen as foundational. Pearce (1980) suggests that the new unprogrammed brain (cerebral cortex) of the baby and child must structure the 'content in potentia' of the old brain system to produce the child's conscious reaction to and perceptions of the 'world' as he experiences it. Of course, if the child is only exposed to our 'normal' anxiety-conditioned view of the world which will give him a false self-reality base, then his actions will never be as flexible or

arise from as highly developed consciousness as possible. Instead, he will be chronically braced against reality, experience little sense of personal power yet constantly struggle for positions of power.

Part 1b. Personality Attributes Considered Important for Effective Stress Management

Certain personality attributes have been associated with states of chronic stress. Those people exhibiting Type A behaviour, who appear to be highly stressed people, seem to be perpetually doing emotional and physical battle against time and other people, in what they consider to be a hostile environment. A sense of worth and survival of A type personalities depends upon status enhancement. Therefore, they tend to neglect the vital forces of affection, love, spiritual growth and cultural stimulation because of their habitual propensity to accelerate their pace of living. Type A people may have an excessive competitive drive, but it is frequently covered by a reluctance to achieve. In other words, they have a deep seated insecurity about their own worth and little sense of personal power. Therefore they are driven into a position of 'a will to power', and in fact they frequently dominate social gatherings. These people also exhibit a continual sense of time urgency, tend to respond to challenges in an inflexible and rote fashion, and judge accomplishments in terms of numbers. It seems that chronically stressed A type people rarely consider the question 'What is it all for?' (Oyle, 1980; Pines, 1980; Friedman & Rosenman, 1971).

Of course, it has long been argued that psychosomatic complaints are 'simply' the result of genetic 'materialistic' inheritance. However, to test this idea Rahe et al. (1978) have conducted a study of the heritability of type A behaviour, by both interview and psychological

test data, with a sample of middle aged, American, monozygotic and dizygotic twins. They conclude that Type A behaviour was a learned response reflecting behaviours developed from early learning experiences.

Of course, in certain respects the type A person, behaviour, life-style and value system, is considered 'normal' in our society. Furthermore, our society may be so disturbed that accurate perceptions of it may well elicit emotional reactions (Oyle, 1979)! This is true in considering pregnancy, birth and breastfeeding in our society where the stress of not finding a humanly oriented support system can indeed add to the natural stress of the family developmental crisis of maternalité.

B-type personalities on the other hand, may be just as ambitious as A type people; but their drive steadies them rather than irritates them. They are able to act on their drive effectively, and tend to work for personal satisfaction rather than beating out competition. In general, B-type people can be said to be more contemplative and more in touch with 'reality' -- they take time to consider options, think out their goals well, and understand their own strengths and limitations (Oyle, 1980; Pines, 1980; Friedman and Rosenman, 1971). It would appear that B-type personalities are more open to the receptive aspects of the feminine, therefore more in touch with 'internal' and 'external' reality, and therefore more free to act according to their drive toward creative perfection.

Effective Stress Management

The most recent studies on stress management may be important considerations for people who wish to approach optimally good conditions for 'human-being' centered parenting. I do not wish to imply

that the studies refer specifically to parenting: they do not. I hope to show later, through a prospective study, that the very attributes that are referred to in these studies do in fact correlate highly with 'success' in human parenting, specifically with respect to breastfeeding. The information derived from this present pilot study will help clarify the stress resistant attributes as they relate to breastfeeding. However, the next immediate step is to state what these attributes are to general stress resistance.

Pines (1980) and Kobasa, Hilker and Maddi (1979)[2] have found that stress resistant people are firstly, and most importantly, open to change, perceiving this as a challenge rather than a threat. In the light of control theory this suggests that they do not have a 'world view' or 'self image' that has to be mightily defended. In other words, they must be able to balance masculine and feminine consciousness in order to perceive 'reality' 'as it is'. (See Chapter IV, pp. 55-57)

Second in importance, stress resistant people tend to have a sense of commitment to what they are involved in, seeing their activities as interesting and important. I see this as an aspect of the 'bonded intellect' -- that can allow the individual to become truly involved in the 'here and now', in problems and ideas. Boredom, on the other hand can lead to excessive risk-taking in a vain attempt to feel really involved in something -- anything (Pines, 1980).[3] Perceiving of parenting skills as important might be very difficult for individuals in our society where child orientation is not the norm. Furthermore, there is a perennial lack of knowledge about child development so that even this topic can rarely be seen as a worthwhile interest, even though it might allow parents to commit themselves to

parenting. (In fact, I have found that parents, given half a chance, are open to learning about child development and as a result of this find their interest in their children's development enhanced.) (Walker, 1975)

The third attribute of stress resistant individuals is that they have a feeling of control in their lives -- control in the sense that they did not conceive of themselves as powerless. In terms of how I have described 'balance of exploration' (see Chapters III, page 40 and IV, page 55)it would seem as if these people who cope creatively with stress are likely to have been people who experienced early relationships of reciprocity, where they were 'appropriately met half-way'. They can thereby consequently see themselves as potent agents of change in their environment, and do not feel restrained and controlled in this context.[4]

Antonovsky has also suggested three "generalized resistance resources", (Pines, 1980) -- characteristics of the person, group, or environment that encourage more effective stress management techniques. Firstly he refers to 'knowledge and intelligence' that allow people to see many ways of dealing with their difficulties -- and to choose, when possible, the most effective means. It is well known that knowledge banishes fear. Furthermore, as outlined in Chapter V, I show that abstraction tends to become hurried and over-generalized, and therefore ineffective, under conditions of stress. I have also argued (Chapter IV, page 55) that it is the bonded intellect that allows for true development of the intellect and creativity. In effect, for knowledge and intelligence to be effective it must arise out of non-stressed receptivity.

Secondly, Antonovsky refers to 'strong ego identity' as a

'generalized resistance resource'. I have suggested (Chapter III, page 38) that a high point of human consciousness can only be achieved from within the individual whose ego is planted firmly in the cup of his body, so that it is possible for him to in fact transcend the ego. So that ego strength, that springs out of body awareness, is important. And it is only at times of ego transcendence, which itself depends on ego strength, that true creativity and healing can flow through the individual.

The third resource for coping creatively with stress that Antonovsky mentiones is commitment to a stable and continuing social network. In Chapter III, page 38/9 I showed how 'self-concept' and 'social relationships' are inextricably linked. Later I indicated that early relationships of reciprocity are essential to this wholesome development where trust of oneself and trust of others go hand in hand.

My developing theoretical framework, coupled with recent research in effective stress management would suggest that the ability to offer effective nurturance through breastfeeding would depend upon parents with a healthy ego/self concept, being realistically open to change, being committed to parenting as an important activity, seeing themselves as competent, effective people, who have experienced nurturing themselves. The parents need to be knowledgeable about human developmental stages, and be relaxed enough to be able to perceive the details of changing situations. Finally, they need to be committed to a support group.

Part II. Stress, Pregnancy, Birth and Breastfeeding

Since breastfeeding is not an event by itself I have presented a review of the literature pertinent to associated events of pregnancy

and parturition as they relate to stress.

A. Toxaemia

Toxaemia complicated 6 - 7 percent of all gestations. Eclampsia is the severe form and is characterized by convulsions and coma associated with hypertension, oedema and proteinuria (protein in the urine).

Interestingly enough, toxaemia is rare or absent in many non-western areas, and these societies suffer from the condition only after contact with the West. Breen (1975) refers to Soichet who describes such 'non toxic' communities as "giving women a particularly important place", and where pregnancy and birth are considered joyful events as compared with our society where there are conflicting emotions surrounding pregnancy. Soichet suggests that toxaemia could indicate ambivalence to the pregnancy and can be seen as

> a defence against a feeling of inner defect and somatic solution to conflict just as schizophrenia is a mental condition to conflict: indeed toxaemia is extremely rare in currently schizophrenic patients. (Breen, 1975, p. 33)

From his research Wiedorn (1954) also considers toxaemia to represent a psychotic equivalence on a physiological level of response to the organism in stress.

Coppen (1958) found that the 50 toxaemic women he studied had difficulties at every stage of feminine development (as compared with the controls). However, his study was reprospective which makes his findings less reliable. But he also found that the toxaemic women tended to have more masculine bodies that may have presented them with difficulty in adjusting to their feminine role. He concluded that

> personality factors and atypical physique could lower the threshold which may be further diminished

> by environmental stress. Once the threshold is lowered beyond a certain point, signs of toxaemia would appear.

Kitzinger (1978) has pointed out that no studies have been done to determine if there are any socially created stresses in the life of a pregnant woman to day which may make it likely that she would become hypertensive. From her extensive interaction with women in many countries Kitzinger has discovered that many pregnant women are aware of changes in their blood pressure depending on whether the readings were taken at the hospital (where they are the highest), in the doctor's office, or at home taken by the midwife (where they are the lowest).

B. Prematurity (Defined as a birth weight of 2,500 grams or less)

Breen (1975) reviewed studies finding that mothers of premature babies tended to have more negative feelings towards the pregnancy and foetus, uncertainty about their feminine identification and maternal status, fear, inadequacy, nervousness and anxiety, and were more helpless and dependent. Unfortunately all those studies were retrospective, and many of these negative reactions could well have been elicited by the birth of a premature child.

However, these mothers also had been more neglected or abandoned by their own mothers, and more were separated from their husbands at the time of birth, than were mothers with full-term babies.

C. Uterine Dysfunction

Women suffering from uterine dysfunction have been described as supressing or repressing their emotions, more anxious and more rejecting of pregnancy (Breen, 1975). Mary Crawford (1968) found that women who reported more than average symptoms of muscle tension during

pregnancy and showed signs of anxiety at the beginning of labour (expressed fear, high blood pulse rate, etc.) developed physical disturbances related to uterine dysfunction, or their infants developed physiological disturbances related to lack of oxygen.

Crawford attributes this to a secretion of adrenaline into the blood stream (as a result of anxiety) which in turn restricts the blood supply to, and inhibits the contractions of, the uterus. Marion Woodman (1980) describes the chronically stressed individual as having the muscles of the belly wall and diaphragm as "voluntarily and antagonistically contracted".

It is interesting and important to note here that when Kitzinger (1975) visited prenatal classes in E. Germany, she found that psychoprophylactic techniques were used as a means of teaching Communist values and the regulation of behaviour. The women she saw were well trained but very tense. This is a good example of the inadequacy of merely exposing people to 'methodology'.

However, the studies reviewed here present methodological problems that make their reliability questionable (Breen, 1975).

D. Post-partum Blues

The phenomenon of the post-partum blues, discussed and studied greatly since antiquity (Breen, 1975) is ill defined, and therefore hard to'diagnose'. The 'phenomenon' does occur in a period when there are great fluctuations in hormonal blood levels, and it has been associated with lack of maternal identification, role conflict and relational problems between mother, father and baby. Most studies mention the women's inadequate relationship with her parents. Women who have experienced early menarche, greater menstrual difficulties, prolonged

menstrual flow, have been found to be more likely to become depressed post partum.

E. Health of Baby

Anxiety during late pregnancy has been linked with babies who were highly active, irritable, restless, having severe food intolerance, vomiting and crying excessively, and having a low level of motor development at birth (Breen, 1980). This relationship, between the mother's anxiety during late pregnancy and negative baby behaviour, has only been direct when the presence of stress was assessed on the basis of the woman's own report of her difficulties. In other words, the woman's perceptions 'dictated' whether the situation would be regarded as stressful.

It has also been found that baby's colic correlates to the mother's eating problems in her childhood, her neuroticism score and her negative self rating of her physical condition during pregnancy.

Bowlby has also emphasized the importance of the infant's behaviour on the mother, showing that different personalities are affected in different ways by similar behaviour of babies. Elsie Broussard and Miriam Hartner (1969) have shown in a prospective study that mothers' perceptions of their babies 'at risk behaviour' indeed turned put to be self-fulfilling prophecies. It would be important in such situations to know if the mother was familiar with child development norms to ascertain whether her perceptions and expectations of her baby were realistic, and so on.

F. The Baby and Stress

Nutritionally breastfeeding is known to be better for babies.

Indeed, in Guidelines on Infant Nutrition (1977) the following was stated:

> Breastfeeding is superior to any other feeding system for infants and it is considered unnecessary to elaborate on this. (p. 3)

Since breast milk and colostrum is so finely tuned to meet the nutritional and immune needs of the newborn[5] one wonders what additional stress the baby is under by not having these needs met as optimally as possible.

In addition, many breastfed babies are given dextrose (sugar) water supplement apparently to satisfy the infant's thirst. Not only has this been found unnecessary (Murphy and Verrier Jones,1979) but it surely also runs the risk of upsetting the delicate balance of insulin production in the body, just as sweet eating does with older people (Woodman, 1980).

Breastfed babies are less likely to be overfed and become obese, and they develop fewer dental caries. Interestingly, both obesity (Woodman, 1980) and dental caries (Zeines, 1980) have been associated with stress.

My hunch about the importance of sucking to a baby seemed to have some substance. Sucking becomes well organized within several days of birth. Cohen (1980) says

> Increasing stress appeared to increase sucking until a point when an individual child's threshold was exceeded and his sucking was disorganized.

When baby boys were circumcised those whose sucking was disrupted also tended to go off feedings, sleep more fitfully and be irritable during the hours following circumscision.

In sum, Cohen maintains that results suggest that sucking can be

viewed as a congenital capacity that functions to modulate distress and inhibit physiological over-activity. (Of course, it is probably not the only stress modulating process the baby has at his disposal, but it is easy to observe.) As such the sucking activity of the baby seems to be one of the first self-regulation techniques at the child's disposal. Its link with the child's being nourished is obvious.

Summary

In this chapter I have connected the physiology of stress with personality attributes and world views. The ability to creatively manage stress is linked with the ability to balance masculine and feminine consciousness in order to be reality oriented, and maintain a sense of committed and appropriate purposiveness. In particular, I showed how feminine receptivity is the grounding for these processes.

Then briefly I showed how chronic stress can negatively affect pregnancy and parturition which lead to the breastfeeding situation. Lastly, I suggested that stress can be induced in the baby through faulty nutrition, and that 'sucking' was possibly one of the baby's first processes of self-regulation.

As outlined in this chapter many of the details of personality attributes, world views, expectations and life-space attributes that contribute to general healthy stress management are suggestive of questions that could be used in prospective, questionnaire-based research. This could be used to determine which parents are most capable of providing human nurturance through breastfeeding, and whether these parents show general characteristics of effective stress management. In fact, I have used many of the ideas in the pilot study in just such a way.

Notes

1. Perhaps these connections between the old brain system and new brain system can best be described in Platonic/Kantian tradition where it has always been considered that the a priori Forms are what is humanly inherited. The actual representations of these forms are not. Perhaps the 'forms' are inherited through the old brain system and enlarged upon, clarified, through the individual's interaction, initiated through his non-imitative movement, with the world. In other words, the new brain system 'structures' the 'content in potentia' (a priori forms?).

2. Unfortunately, although their samples have a large N (N=670; N=259), they only involve men.

3. Marie Louis VonFranz (1970) has made an interesting study of men who became accident prone who, in their refusal to relate to the feminine, remain perpetual 'puers' and lose touch with the realities of their body limits.

4. It is interesting to note that infant rats who can exercise increasing control of their environment (as well as receiving stimulation and handling) show less anxiety when tested in an open field situation several months later). (Quoted by Cohen, 1980).

5. There are progressive increases in fat and lactose, with a reduction in protein and mineral content. Colostrum also contains macrophanges which provide its cellular anti-infective properties (Murphy & Verrier Jones, 1979).

CHAPTER VII

A SINGLE CASE STUDY

The general topic being explored is that of demand breastfeeding as primary elicitor of the relaxation response. The following single case study consisted of a series of nine interviews with a young couple who elected to breastfeed their first child. Peripheral skin temperature readings of mother and baby were taken on six of these occasions, and increases in peripheral skin temperatures have been associated with increased relaxation.[1] This single case study is a preliminary step to try to further ascertain firstly if this is a worthwhile topic to explore in general; and secondly, if this present approach is most useful.

Subjects of the Pilot Study

The research participants in this phenomenological pilot study were a married couple called Pam and Kent Taylor. They had elected to breastfeed their first child. They were able to provide rich descriptions and were able to engage in the imaginative development of ideas -- important attributes for such a study. They were articulate, open to various perspectives and interested in human development.

Both Pam and Kent have worked professionally with young children and their families. Pam's bachelor's degree was in the area of Early Childhood Education, and Kent's Master's degree was in counselling. At the time of the baby's birth, and subsequently, Kent was working at the City's Conciliation Board. Pam had maternity leave from Grant MacEwan Community College, where she later resumed her teaching position when the baby was five month's old. Pam has two sisters and

Kent has two brothers. Pam's parents live in California where Pam met Kent when he was studying at the University. Kent's parents live in Edmonton -- and always have.

Shortly before the conception of their child Pam and Kent purchased their first 'owned' home -- an older home in the Virginia Park area of Edmonton, with bicycling and walking paths in a nearby ravine.

A Single Case Study

Single case studies seem to be more common when a new field of enquiry is being opened up. Often they contribute to our understanding of the focal issue by their idiosyncratic, rather than pervasive nature, and their tendency to be expansionistic rather than reductionist in pursuit.

Single case studies have been criticized as not leading back to generalizable statements about the population. However, Stake (1978) argues that in fact, the opposite could be true. Single case studies may be the preferred mode of research because "they may be epistemologically in harmony with the reader's experience and thus to that person the natural basis for generalization".

Traditional research seeks to develop statistically based generalizations that can be said to approximate everyone and resemble no one. A single case study, for me, has come to mean, rather, a search for the universal, in just the same manner as a painter also searches for it, as a mandala type of contemplation.

> The universal is that unique thing which affirms the unique quality of all things. The universal experience is that private experience which illuminates the private and personal world in which each of us lives the major part of his life (Shahn, 1957, p. 54)

Ali Akbar Kahn, the Indian Sarod player, said "All music is in the understanding of one note" (Beittel, 1979). This certainly implies a holographic stance where the whole picture can be perceived in each fragment of the plate. Of course, the smaller the fragment the more blurred is the picture. But nonetheless, the hologram splinter 'contains' the propensity for completeness within it.

Aims of Pilot Study

The pilot study has four aims:

1(a) To see whether there were temperature increases during the nursing period for the mother and baby.

(b) To test the instrument used to detect temperature changes. This was Biotic Band No. II, a thermochromatic liquid crystal temperature indicator.

2. To explore carefully the dynamics of the breastfeeding situation in the life of a middle class couple in the cultural milieu of Edmonton, Alberta, Canada. Specifically, I was interested in determining whether there were features that would tend to militate against the relaxation response, even if physiologically breastfeeding seems to induce it.

3. To isolate variables that might interfere with data collection, in a later, perhaps more traditional study.

Method

Interviews

The nine interviews were organized at the convenience of all and thus they varied in length from an hour and a half to three hours, and occurred at different times of the day. The interviews

closely resembled clinical interviews in that no strict format was followed. For instance, I would frequently mirror back what I had heard, to clarify issues. Also I would share my own memories and concerns though attempting to colour Pam's and Kent's responses as little as possible. On two occasions my daughter accompanied me in my home visits. The last occasion on which I met with the family was when the baby was nine months old -- to ascertain retrospective insights. Each session was audio taped and additional notes taken to record gestures, impressions, ideas and observations. Information and progress were shared with the informants to check accuracy. Essentially, trying to find out about the nursing experience for this family consisted of a series of conversations in their living room (and once in mine), and the readings from the Biotic Band II taken during casual conversation.

At the beginning of the research we agreed on the basis upon which we would proceed. We hoped that the experience would be beneficial to all. I told Pam and Kent that if at any time the experience was distasteful for them I hoped they would feel free to terminate it -- for a period of time or permanently. I was very conscious throughout the proceedings of my vulnerability in 'loosing' my 'research', so to speak; and I suspect this agreement alerted me to the necessity for sensitivity in a special way! Of course, observing intimate behaviour is never easy -- for anyone involved. And breastfeeding has become intimate behaviour in our society.

Temperature Readings

Temperature readings of the mother/baby dyad were taken on six of the nine interviews. Readings were also taken of the mother prior

to birth in an attempt to establish her base line. The sensors used were Biotic Band II. It is a thermochromic liquid crystal temperature indicator usually applied to the finger. However, I obtained some of the bands without the velcro tape fasteners and applied them to the locations with hair tape. This allowed them to be applied to different parts of the body than the finger. The temperatures on the band are accurate to approximately .5°F. The Biotic Band II has a range of 20 F divided into two degree intervals ranging from 78° to 98°. Colour changes in the various segments of the band make it possible to read temperature changes of .5°.

The placement positions on the mother were on the inside of the wrist (I alternated left and right), on the upper second segment of the middle digit of the hand, and inside the ankle of the foot. The placement position on the baby was on the bottom of both heels. All sensors were to be placed in position five minutes before nursing so that they had time to stablize.

It is possible that this study could be faulted from the point of view of a phenomenological study for taking temperature measures. Giorgi (1970) criticized Kagan in monitoring cardiac and respiratory rates as good 'indices' of attention, as "still limited to seeking promising strategies of measurement," rather than apprehending attention precisely as a phenomenon. However, I have done this measuring not so much to 'measure relaxation' as such, but rather to attempt to become more acutely aware of interconnections within the nursing situation. Furthermore, to adopt one research approach completely, at the expense of loosing insight, would be to run from one end of the teeter-totter to the other!

Results with Respect to Temperature Changes -- Mother

The pre-birth interview was an attempt to ascertain how long it took to establish baseline readings with the sensors. It appeared that it took five minutes for the sensors to stabilize on Pam.

However, it was not always possible to have them in place prior to nursing for exactly that period of time. For instance, if the baby was crying I did not want to interfere by taking time to attach sensors. I felt that it would be unethical to interfere with what was already a stressful situation for mother and baby. In fact, on three occasions no readings were taken at all.

During the first visit the sensors were kept in place whilst we talked and the temperature remained stable until there was a sudden dropping off which occurred when Pam started to discuss an anxiety producing situation encountered in the hospital where she had been recently admitted for high blood pressure.

During the second occasion of taking readings the overall changes in temperature for the mother were 12°F at the wrist, 14.5°F at the finger. This was the largest increase during the entire period of data collection. Pam did mention that she had never had such a smooth-flowing nursing session. This point can be looked at in the light of cross-cultural studies where so often the doula (in the form of co-wife, a mother-in-law, a friend who went through puberty rite ceremonies with the mother, and so on), is there to support the new mother (Raphael, 1976). This time can be particularly difficult for a career woman who is apt to loose touch with her usual circle of friends who stay at the scene of 'work'. Of course, in Alberta, there are many couples cut off from their families as a result of being drawn

here by the magnetic quality of the province's 'oil boom'. Pam and Kent were not in this position having been here as a couple for several years prior to the birth of this first child. However, although Pam phoned her friends, and later took Matthew to visit them, she had no companion on the form of a 'doula'.

On all occasions of data collection there was an increase in temperature in the mother from all sensor locations, during the nursing period. However, it is not possible to tell exactly whether this was due to "simply" sitting down, or to other factors, and whether this increase is significant. At the time of collecting this data I had not thought of taking temperature readings of Pam sitting down without the baby, or of Pam simply moving around normally.

However, sitting down is not necessarily a "simple" matter. During session three Pam sat in high, hard upright chair with her legs crossed much of the time and her heels elevated, so that her legs were high enough to help support the baby. On the previous occasion she had sat in a soft chair with a cushion under her feet (my suggestion) and Kent had not been present. At the end of this session Pam remarked, with tears in her eyes, that the real problem for her was that she found it hard to actually sit down in order to nurse. Having been an active career woman and one who described herself as meticulous about the order and cleanliness of her home, this was a totally new experience for her. Several times Pam told me of her father saying, "Do your work first and then relax". This attitude of Pam's father would not make it easy for him, and therefore Pam, to appreciate that perhaps 'relaxing' is the true 'work' in certain situations.

The importance of being able to sit down and nurse a child was

reinforced for me since after the second visit I left the Taylor's home to do some shopping at the supermarket. There I saw a baby of the same age as Matthew, being pushed by its mother in a shopping cart, with its bottle propped in its mouth. The mother seemed so tired, -- she was very pale, her eyes were heavy and she seemed stooped over with care. This scene was so different from the one I had just witnessed with Pam and Matthew.

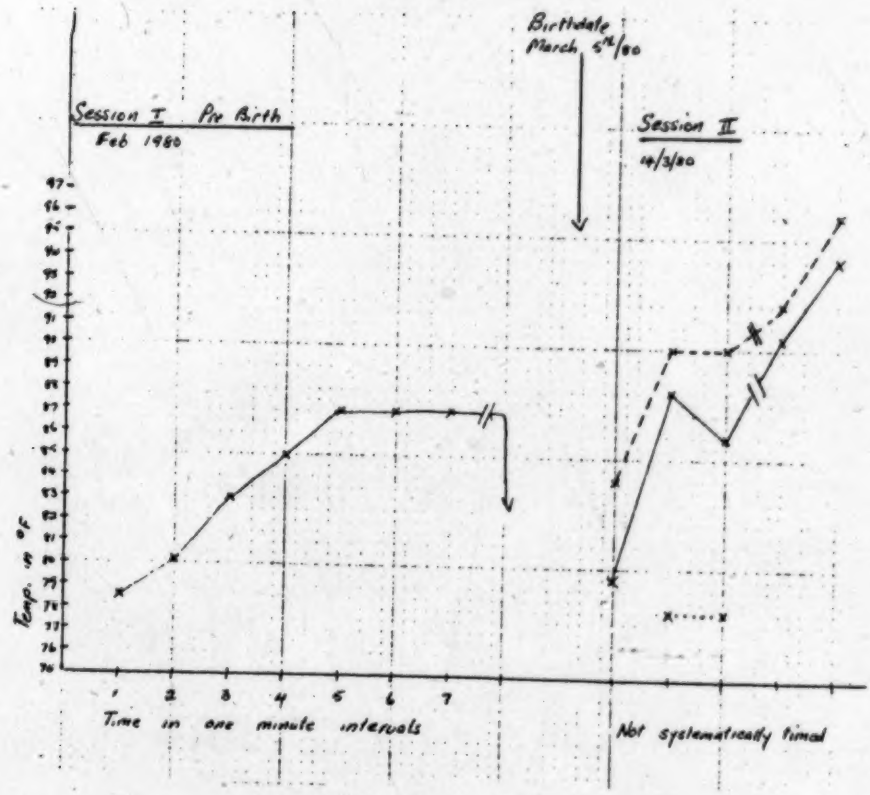
There were temperature decreases at the wrist location at the time of changing the baby from one breast to the other. This could have been due to the fact that getting the baby established on the nipple can be a difficult and frustrating task for a new mother. The wrist might monitor this first since this sensor location is closest to the mother's main body. Also removing the wrist from the baby during the procedure would allow the wrist to loose heat. This latter point is perhaps a more likely explanation.

Summary

Overall, there was an increase in peripheral skin temperature during the nursing period. Greatest increases occurred at the finger location (average 8°F) and least occurred at the ankle location (average 3 F). (See Table 7) The initial temperatures at the three locations varied over five degrees. The warmest starting temperature was at the wrist (average 88.0 F) and the coolest was at the ankle (average 83 F). (See Table 6)

Since it is closest to the body centre, I would expect the wrist to be the warmest of the three locations. However, the greatest increase in temperature occurred at the finger location, further away from body centre than the wrist, it therefore seems likely that there was a

TABLE I



Graphic Presentation of Temperature Readings

From Biotic Band II For Mother

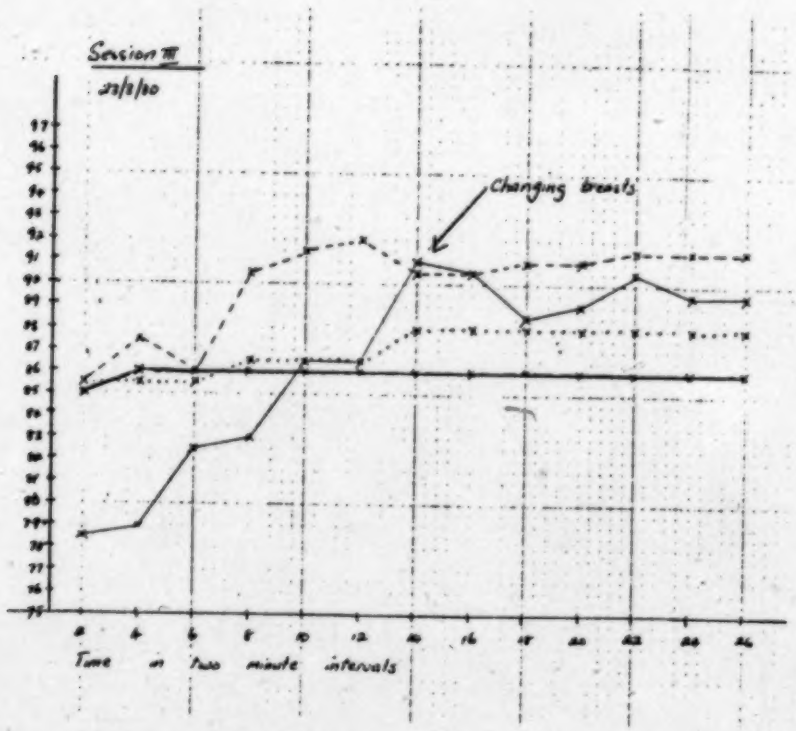
_____ finger

------ wrist

..... ankle

_____ baby

TABLE II



Graphic Presentation of Temperature Readings from

Biotic Band II For Mother & Baby

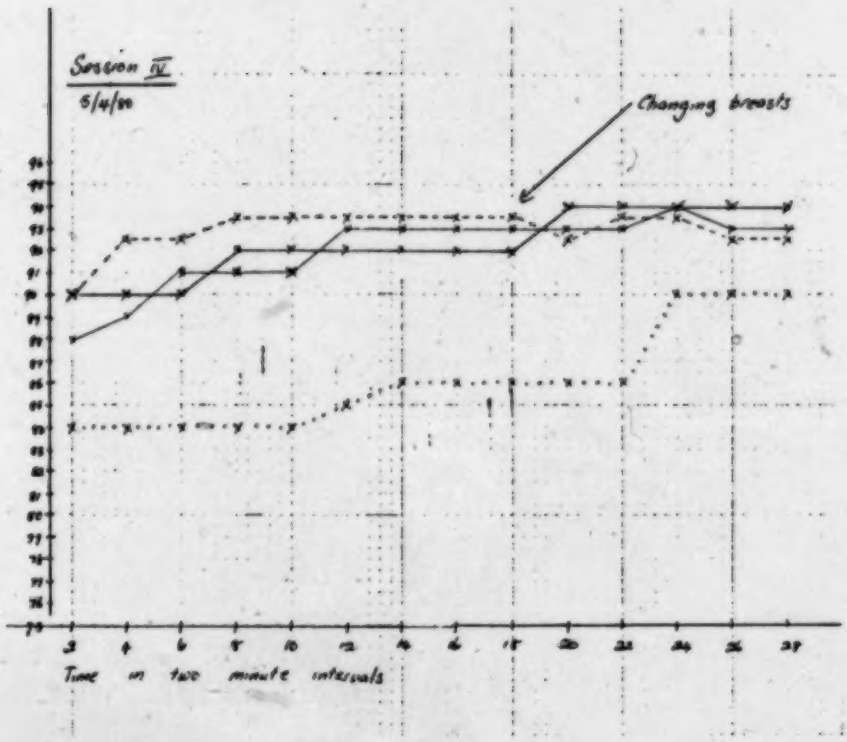
_____ finger

------ wrist

..... ankle

- - - - baby

TABLE III



Graphic Presentation of Temperature Readings from

Biotic Bond II for Mother & Baby

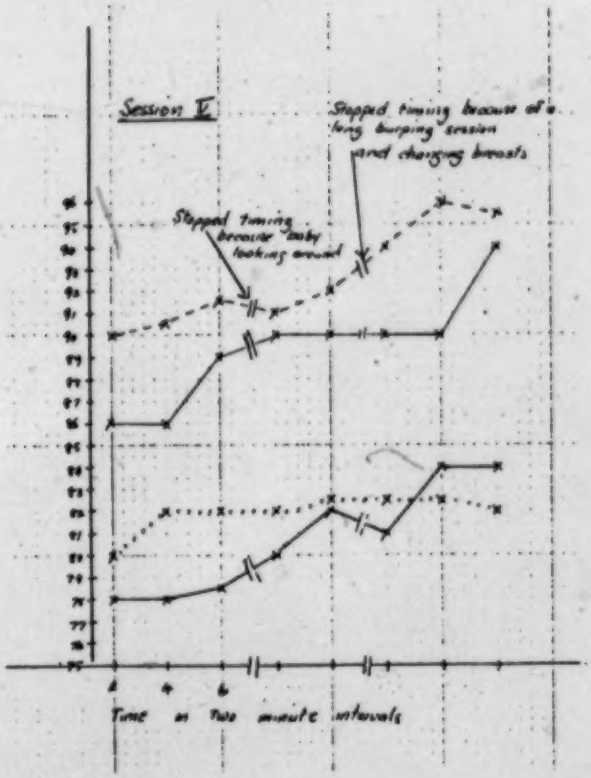
_____ finger

------ wrist

..... ankle

——— baby

TABLE IV


Session V
Stopped timing because of a long burping session and changing breasts
Stopped timing because baby looking around
Time in two minute intervals

Graphic Presentation of Temperature Readings

From Biotic Band II For Mother & Baby

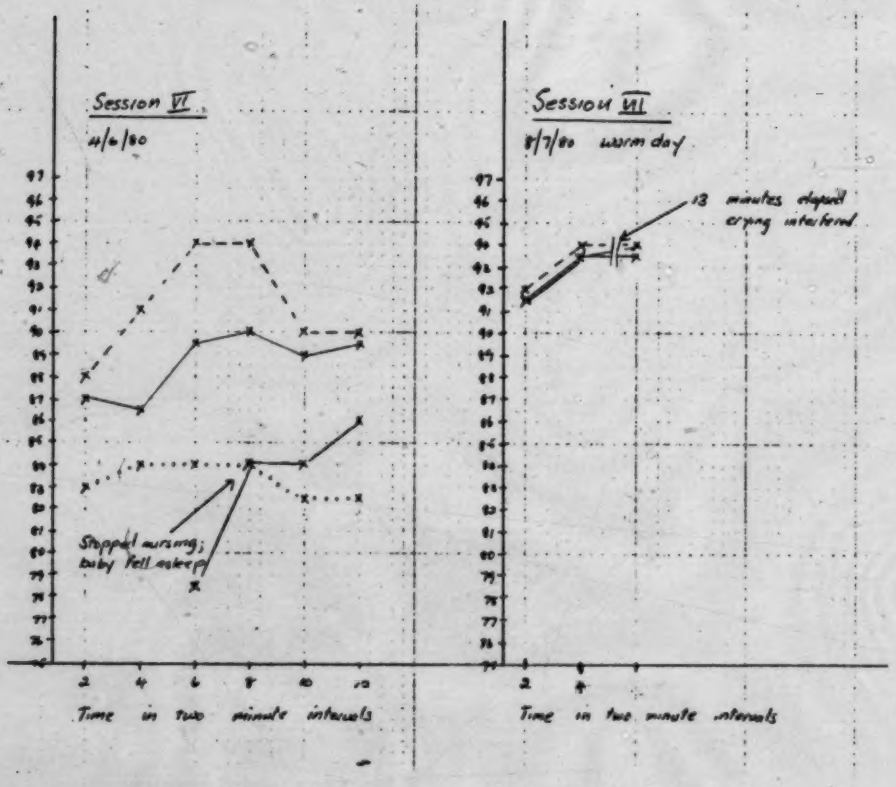
_____ finger

------ wrist

..... ankle

_____ baby

TABLE V



Graphic Presentation of Temperature Readings

From Biotic Band II For Mother & Baby

_____ finger

------ wrist

..... ankle

_____ baby

TABLE IV

Initial Readings for Each Session From

Different Sensor Locations

Session	Finger	Wrist	Ankle
I	78.5	-	-
II	79.5	84	-
III	78.5	85.5	85.5
IV	88	90	84
V	86	90	80
VI	87	88	83
VII	91.5	91.5	-
Average initial temperature (F) at different Sensor locations - post birth.	85.0	88.0	83.0

TABLE VII

Range of Temperature Increases at the Three Sensor Locations From the Beginning of the Nursing Periods

Session	Finger	Wrist	Ankle
I (Pre birth)	9.5	-	-
II	14.5	12.0	-
III	12.5	5.5	2.5
IV	5.0	3.5	6.0
V	8.0	6.0	2.5
VI	3.0	6.0	1.0
VII	2.5	2.0	-
Average increase in temperature (F) at different sensor locations on mother -- post birth	7.6 +8.0	5.8 +6	3 +3

spreading of the relaxation response, induced by increased blood flow, to the peripheral areas of the top part of the body.

Pam's ankle temperature was the lowest of the initial temperatures and also gained least heat. It is difficult to know whether this variation is normal or suggestive of difficulty in allowing the relaxation response to reach the lower half of her body.

Specifically the relaxation response was negatively affected by Pam's anxiety re hospitalization because of toxaemia, and the possible tension related to changing the baby from one breast to another. Relaxation was also interferred with by Pam's choice of an uncomfortable chair, which in turn revolved around her difficulty in giving herself permission to sit down and take time to nurse the baby. On the other hand, relaxation was facilitated by the presence of a woman whom Pam perceived as a supportive companion.

Since I felt that taking the readings sometimes interferred with Pam's process, further validation of temperature changes would require sensors permanently in place that could be read from a distance. Furthermore, collecting data as I did presupposes specific and fairly lenghthy periodsof nursing which in fact may not be the most natural approach to this multifaceted experience.

Results With Respect to Temperature Changes -- Baby

In general, there did seem to be an overall increase in temperature during the nursing period that averaged 4.4 F. Pam commented that often the baby's hands and feet felt cold when she first picked him up when "he was hungry", but that he was warmed up by the experience of feeding.

Affixing sensors to the baby was extremely difficult -- even though they had no wires attached to them. Firstly, the baby was often

TABLE VIII

Temperature Readings for Baby

Session	Increase in Temperature	Initial Temperature Readings
III	2.0	85
IV	4.0	90
V	6.0	78
VI	7.5	88.5
VII	2.5	91.5

crying and kicking just before nursing. Secondly, he would often kick off the sensors during nursing. Finally, as he matured it was easy to see that he was aware that the sensors were in place -- his sucking pattern would change and he would start rubbing his feet together. The sensors were often difficult to read because the baby curled his feet around Pam; and then I discovered that torch light caused colour changes of the bands.

Since the period of collection of temperature data I have found a useful and detailed description of sensor application to babies for a 24 hour period, with suggestions for early preparation of equipment, adherence to sequence, and timing of events, and the pleating of adhesive tape (Hoffman et. al., 1979).[1] Unfortunately, the research (related to sudden infant death syndrome) took place in a hospital and the sensors all had wires attached to them. The parents involved were told that they could stay overnight, which would be helpful to breastfeeding families, it was explained. However, many of the real intricacies of the breastfeeding situation seem not to have governed

the research design. Also the research was built on the assumption, so prevalent in our society, that "newborn infants sleep throughout a 24 hour day with interruptions for feeding and care" (Hoffman, et. al., 1977). These theoretical and methodological 'inadequacies' (from my perspective) are particularly unfortunate, since the sudden infant syndrome was in earlier research found to occur less in breastfed babies. Later research has not adequately supported this conclusion (Beckwith, 1977). But perhaps it is in the interconnected intricacies of the breastfeeding situation that the 'cause' for the syndrome can be found.

In sum, I conclude that temperature readings of infants will not be particularly useful for future research in this area of enquiry. I suggest (see Chapter IV) that sucking and smiling responses might be more useful measures of relaxation for baby.

Results Re General Methodology

During the last interview Pam and Kent maintained that my visits provided them with a 'catalyst for thinking', that they had not found me intrusive, and that they had "enjoyed" my visits. There was one occasion when Kent did not want me to visit, though 'coincidentally' I had cancelled that day's appointment.

Kent in particular, did not want to see their baby hooked up to any 'machine' -- the possibility of which we had originally explored. He explained that he knew it was "irrational and possibly overprotective ... but ..." He also said that he was glad that I had a daughter since he knew that I "wouldn't do anything to Matthew that I wouldn't do to Nicholette." (I noted that in the Hoffman study no comment was made about the parents feelings on seeing their children attached to sensors and almost totally covered in bandages.)

Kent elaborated that if I arrived at the house as "a researcher" when Matthew was "really crying", then he (Kent) would feel judged and inadequate. However, if I arrived "as Evangeline" it "would have been OK"; he would have felt free to ask me to mind Matthew whilst he would take a walk to cool off. (I have just realized that it is no longer sufficient for me to talk about 'minding' a baby: I would have to talk about minding/bodying him if I am to be really consistent!) We were never able to put this notion to the test because Matthew was never "really crying" upon my arrival when Kent was at home.

Also, I am sure that the fact that I was a woman made a difference in the ease with which both Pam and Kent allowed me to spend time with Pam and Matthew, without Kent's presence.

Summary

In sum, the sex, family status, and general sensitivity of the researcher had important subjective effects of the participants. Since I never expected my imput in their lives to be value-free I was glad that I had clarified, for myself, the values I had -- at least to some extent -- I felt free to be subjectively supportive of the new family rather than clinically detached.

Temperature readings might be useful in ascertaining fluctuations in relaxation of mothers, providing that the sensors were permanently in place and could be read from a distance. However, I conclude that peripheral skin temperature readings are not useful measures of relaxation for babies: smiling or sucking might be better indices. Biotic Band II proved to be an inadequate instrument for this work with respect to both mother and baby, even though it has the advantage

of being wireless.

Further Information Drawn from Interviews on the Breastfeeding Situation of the Taylor Family

Pam, Kent and Matthew were very generous in sharing their experiences with me on the nine visits and several phone calls that I made. I have selected to write about Pam and Kent individually and about their relationship, in order to bring meaning to what I saw, heard and felt of their breastfeeding situation.

Pam and Breastfeeding

a. Why she chose to breastfeed

During the last interview, when Matthew was nine months old, Pam explained why she had wanted to nurse him. As a woman she had wanted to find out more about this feminine ability to nurse, since she saw it as a most important part of nurturing, she said, "I don't just want to copy males ... (and) I'm not just an independent woman." She was glad to have previously had time on her own to develop her own personhood and desired, above all, not to unconsciously pass on to Matthew the destructive elements of her own upbringing.

b. Lack of role models, and Pam's relationship with her mother

But at the same time, Pam felt she had no good role models. Her mother had not nursed her children and Pam had not witnessed breastfeeding until the last few years, amongst her students. It is unfortunately true that many women in our society are more poorly prepared for parenting than either their mothers or grandmothers, or women in less sophisticated, less advanced industrial societies (Kitzinger, 1978).

Pam felt that she had acquired from her mother her fear of birth and pain -- much of the loss of which she attributed to the pre-natal classes she attended. Her mother had frequently told her that she "should never have children because she couldn't stand the pain". And yet she also presented Pam with the idea that, yes, she could go to college, but that her primary function was to get married and have children. So Pam had been placed for much of her life in an unarticulated double-bind situation.

Although Pam's mother's views on sexuality are not verbally expressed Pam felt that her mother rejected her body and sexuality. Pam could talk to her about such things as breastfeeding and though her mother would be in verbal agreement with Pam, this was for Pam, surface accord only. Pam saw herself as a "constant challenge to her mother." In the light of her relationship with her mother it is not surprising that Pam could not feel free to ask either her mother or sister, to come and stay with her after the birth, in order to support and help her. However, Pam saw her eventual ability to give birth in an undrugged, husband-supported way with a "sense of victory" -- she did not have to "remain conditioned" by her mother. It was, as Pam laughingly explained, "further proof ... that I am not her daughter."

However, a few months after Matthew's birth Pam took him to visit her family. For the first time in her life Pam felt truly accepted. She found her mother "less critical", "more supportive" and not trying to "take over". Of course, Pam explained, "I was fulfilling my mother's expectations." But perhaps she was also experiencing a universal "elevation of status" associated with bearing

a child (Kitzinger, 1977). It is interesting to note that as Pam differentiated herself from her mother, in a new way, she also found more acceptance of and from her mother -- an important development in human growth and understanding, specifically with relation to an appreciation of 'the feminine'. (Breen, 1975)

c. Support Services

Pam remembered her grandmother and other family women getting together to discuss birth. They were "never really supportive of each other -- just miserable", and no effort was made to understand the situation. Pam saw her mother as "long suffering", spending her life in "being negative" and viewing each of her children as "a cross to bear". For Pam's mother the subject of birth in "no sense was a profound experience."

Pam never went to these sessions of the female members of the family: neither did she go to "gossip sessions with girlfriends". She has always considered herself "very independent" -- a trait she feels she inherited from her father. At eighteen years of age, she went to her family doctor for birth control advice, feeling she was making a responsible decision. She refused to give her parents' name and address "even in front of a waiting room full of people" and in the face of an authoritarian nurse. (This ability to maintain her own locus of control seems to have dictated Pam's present choice of doctor and also her ability to remain 'centred' whilst giving birth in the face of yet another authoritarian nurse.)

At prenatal classes all the parents had been encouraged to use community resource services during the post partum period. However, before birth Pam felt she could not use them -- she felt she would

only see them as an intrusion. After visiting her family with Matthew, and having had such a good time Pam felt she could ask either her mother or sister to come and support her if she had another child.

Pam felt that earlier in her life she had always had other adults to go to -- such as teachers. And this ability of her to seek out certain types of resources again was reflected in her choice of doctor. Because of her views of the importance of women's experiences Pam sought out a woman physician who was herself pregnant at that time and gave birth a month after Pam. This doctor was a woman who shared many of Pam's values. Several times Pam explained how happy she was with the doctor's treatment of Matthew as a human being, and this influenced Pam's peace of mind. Interestingly, it is known that women having different views from their doctors tend to have longer labours (Rosengren, 1961). Having earlier shown the importance of not prolonging labour this choice of Pam's was important.

d. <u>The Sensuality of Nursing: Feeding versus Nursing</u>

Pam enjoyed the sensuality of Matthew "nuzzling" his nose on her breast when he was "too excited to start nursing properly", and the feel of his hand on her breast. It was the loss of physical contact that Pam expected to be one of the most difficult aspects of weaning Matthew. Pam found the early morning feeds (4:30 a.m. - 6:00 a.m.) particularly pleasureable, since Matthew was so hungry and she could satisfy him easily at this time: he was calm, her breasts were full. Matthew could sleep again soon afterwards which allowed Pam to do the same. She liked Kent bringing the baby to her in bed in the morning so that she could receive him "in a more relaxed state". Pam was pleased to be able to sooth Matthew with her breast after his

immunization shots, and pleased at the convenience of nursing when travelling. However, it was interesting to me that Pam always talked about 'feeding' Matthew although she obviously was aware of the nurturing, soothing aspects of breastfeeding. She also explained that there seemed to be no reason in terms of hunger "why Matthew should sometimes nurse from one breast and sometimes from two". Several times Pam expressed concern that she would not be able to satisfy Matthew's hunger. She told me that since he was 20 days overdue her doctor had explained that Matthew's sucking would be stronger and that he would be very hungry. These references to 'feeding' were interesting to me since they suggest a compartmentalization of feeding versus nurturing. In England 'nursing' is something that anyone can do -- because it consists of holding and cuddling the baby.

e. Specific Reference to Stress Management and Pam's Relationship With Her Father

Pam's greatest difficulty in nursing Matthew appeared to come from the fact that it "interfered" with other things she wanted to accomplish. This is such a different attitude from societies where child rearing is a woman's raison d'etre. In our society the childbirth years are increasingly seen by certain groups of women as an "interlude" -- and all the more frought with anxiety because of difficulties of rejoining the work force at a later time.

The other problem was sheer exhaustion compounded by the enormous role adjustment that our society demands. Even staying alone in the house was a new experience -- and of course may well have contributed to her anxiety.

Pam explained that her constant business was a trait acquired from her father. He had constantly admonished his children to get their "work done" before they relaxed. Indeed, Helen Lopota (1971) has pointed out that not only in the home but also at school and work the young girl and woman is now taught to be task oriented, to measure accomplishments in terms of a finished product, and to organize blocks of time within a specialized division of labour. This training is indicative of an outlook that is strikingly similar to my description of aspects of male consciousness. It is hardly an outlook that facilitates flexible parenting that cannot be 'a' specific set of tasks. Parenting is never 'finished' and certainly cannot be time-slotted.

Pam found herself in a paradoxical situation where she was on the one hand frustrated because she was "so used to being active", and yet exhausted from trying to meet Matthew's needs. She found herself sleeping with her watch on (where previously she had taken it off when returning home) to "constantly calculate when he's going to eat". Thus although she was making a tremendous effort to meet Matthew's developmental needs she was also very much a member of our society in her response to time. Really letting the baby nurse on demand was complex for Pam.

When experiencing the first rush of exhaustion and upheaval of Matthew's arrival Pam tearfully explained that her real difficulty in breastfeeding lay in actually sitting down. She also tried to read whilst nursing but kept catching Matthew apparently trying to make eye contact with her as if to draw her back. And though Pam found this fascinating, and understood the importance of eye contact for a baby, it non-the-less frustrated her.

Pam told me, about three weeks after Matthew's birth that with respect to breastfeeding she felt she had "been sold a bill of goods" and that she found herself "gritting her teeth". However, the fact that she knew she would terminate breastfeeding at a specific time in order to return to work, encouraged her to continue nursing. This was an example of her attitudes to time working to her advantage where it had previously militated against flowing with the nursing situation.

Although Pam was intellectually aware that all mothers have ambivalent feelings, hers at times seemed overwhelming. She mused:

> Maybe I'm not suited to nursing ... if I'd had more models as I was growing up ... or do all mothers go through periods of self doubt?... It does help me to slow down, centre myself a bit more ... it also helps me create time for reflection -- something I don't think I've done on a consistent basis every day.

Of her state of consciousness, more specifically, whilst nursing Pam wrote:

> I know that when I'm nursing Matthew I do tend to fantasize. My fantasies have a dream-like quality -- quickly moving through my mind and then gone again. I'm not aware of what my fantasies are, nor whether there are any recurring themes ... Often when I'm feeding Matthew I will suddenly, mentally, pull back to Matthew and I sitting together. I don't know where I've been or how long I've been there.

Interesting Pam had no sinus headaches or hayfever whilst nursing Matthew. This was interesting for me to note because my 'allergic' responses also left me during the nursing period.

f. Society hostile to Children

Although Pam has worked with young children and their parents she felt that the experience of having Matthew made her even more sensitive

to their needs. She was also more aware of how non-child-oriented the North American society really is; this realization frequently caused Pam anxiety. When she was talking about specific incidents her voice changed and Matthew started to cry. (Picked up later on the audio tape.) Pam said she felt as if she had to act as a "buffer between Matthew and the world". The different value system of Kent's parents make both Pam and Kent tense. For instance, the grandparents say "that babies need to fuss and they try to distract him", "as though he's now allowed to have his own feelings", Pam explained to me.

Kent and Breastfeeding

a. Exploring Nurturing

Before Matthew's birth Kent was most open about his self questioning and exploration. He was also glad to have waited to have a child: he now felt comfortable with himself. He described himself as "nurturing", and that even though he had played hockey he had never been "macho". But he did wonder what other guys would think of his new nurturing role. "Will I give myself permission to nurture -- particularly a baby boy -- to kiss him and say 'I love you'?" Kent pondered.

When putting up the baby's crib Kent had felt that it looked so comfortable that he wanted to climb into it. He said that he had had a poor fathering role model, being rarely touched and constantly "being put down". Kent thought that this lack in his early life had caused him to be "shy", "pessimistic", and "feeling incompetent", and with a deep fear of authority that made him rebellious. However, he knew that his father before him had had no good models either and had

been the oldest in a large family, so that to some extent Kent saw his father as vindicated. Kent's mother "did not want to witness birth" though Kent felt she would have liked to have breastfed her children and be closer to her family.

Kent was always supportive of Pam and Matthew and took his nurturing role very seriously, being delighted in Matthew's growing recognition of and delight in him. At no time did it appear that Kent perceived Matthew as a rival to him for Pam's time and affection. Neither did I ever witness Kent using a superior male sense of gamesmanship (Kitzinger, 1977) to escape from parenting response-abilities and tasks.

Importantly, it was Kent who initially found out about La Leche League, a support and education group for parents already motivated to breastfeed, and he encourated Pam to attend, starting early in pregnancy.

b. Birth of Matthew and an anti-human Society

Kent said that he had always been afraid of babies because people had "thrust" them at him. But "it came naturally" with Matthew because Matthew was "there ready to respond". About the birth, Kent commented

> I didn't feel inhibited at that point ...
> I felt a lot of joy ... I was fascinated with
> the baby and lost track of everything else.

Kent had worked along with Pam during the labour and delivery. He said that what helped him relax was having the tools to help Pam -- an experience not unfamiliar in other cultures where the man can be meaningfully involved in the total experience.[2] He found one nurse in the labour area particularly exacerbating by trying to manually

"thin out the last part of the cervex" and putting Pam on her back to do so. She tried to "lay a guilt trip on Pam" ("You want to get this baby out, don't you?") and encouraged Pam to adopt a competitive attitude with one of the other labouring women. Kent found this nurse "so insensitive" and seeming to follow the dictum "do it on our time schedule". But Kent, like Pam was able "to turn off" this nurse, and both Pam and Kent were able to stay in control of their feelings and be task oriented. Both Pam and Kent would have preferred a labouring room to themselves -- instead of being faced with "mass production -- curtain after curtain".

Matthew was delivered vaginally as an overdue, though healthy baby. He was placed in the nursery for the first night so that Pam could rest. He was not circumcised and appeared to experience no difficulty learning to nurse.

During our last interview Kent said that as a male he felt he had to constantly fight for his rights as a father in our society, and that he felt lonely in that situation. Earlier he had been angry not to have paternity leave. It is true that we do not offer much real support to mothers, but perhaps the male is in an even worse position, since he receives no reinforcement (except as provider), and many men have few, if any, friends to begin with.

c. Stress Management

Currently, Kent seemed to be developing certain techniques for stress management. He had been reading some of the literature since suffering from a bleeding stomach ulcer a few years ago. These techniques included preferring to now take the bus, rather than his car to work; walking more; finding ways to relax at work. He expressed

appreciation of the time alone before Pam and Matthew arrived home in the evenings, so that he could relax a little by himself. Kent also said that he now understood why parents abuse their children when they suffer from chronic stress. In general, Kent maintained that Matthew's arrival had made him further sensitive to children's needs. He talked a lot about his bonding to Matthew -- cuddling him in bed and "sleeping in", -- something he had never previously done!

Pam and Kent's Relationship

Both Pam and Kent felt that the experience of sharing prenatal classes, birthing and nurturing of Matthew had brought them closer together. They had previously not shared many activities -- each one being busy with their own lives in a certain sense.

The post birth and early nursing exhaustion certainly made them both irritable and put them under considerable strain. During the last interview both laughingly said their sex life was "almost non-existent" -- that they were too tired "having both worked all day and then cared for Matthew in the evening". Kent did say this was a strain for him.

The only argument I witnessed was a most interesting one. It occurred just before the conclusion of our last interview and in a sense brought our time together back to its starting point. The argument concerned the use of baby aspirin. Kent appeared to think that perhaps Pam gave them too easily to Matthew when he was teething. Pam on the other hand maintained that though she was "leary of medication and additives" she did not want to over-value "stoicism". (Indeed one of the biggest concerns for Pam, with respect to weaning Matthew was trying to find a formula without additives. Also, both

she and Kent have been alerted to the dangers of additives through trying to monitor a diet for Kent to alleviate stomach ulcers.) There followed an interesting discussion between the three of us on the importance of the necessary balance between accepting pain and negating it -- a complex issue in our society, and a topic at the forefront of behavioural medicine. It is a topic intimately woven with a thread of bright red between the warp and woof of the fabric of our society, its reigning paradigms, our conception of medicine and health and the human mind/body base of familiar and societal structure. Kitzinger (1977) states,

> In achieving the depersonalization of childbirth and at the same time solving the problem of pain, our society may have lost more than it gained. We are left with the physical husk; the transcending significance has been drained away. In doing so, we have reached the goal which perhaps is implicit in all highly developed technological cultures, mechanized control of the human body and the complete obliteration of all disturbing sensation. (p. 162)

Summary

Positive Personal and 'Life Space' Attributes for Coping Effectively With the Stresses of Pregnancy, Birth and Breastfeeding

In so many ways Pam and Kent both individually, and together, showed many strengths and advantages known to be necessary for successfully dealing with the stresses of the first pregnancy and breastfeeding. In Sweden, for instance, the women who breastfed well were found to be resourceful, 25 years or older, well-educated, married and living under good social conditions (Hoffvander and Sjolin). Pam met all these criteria. It was also found that having 'rooming in' at the hospital, not weighing the baby before and after nursing, and early feeding after delivery (within 10-15 minutes) led to better

breastfeeding conditions. Again Pam and Kent had these benefits.

a. Stress and Commitment

Both Pam and Kent had a commitment to nurturing through breastfeeding: they saw its value at many levels. Stress resistant people generally have a sense of commitment to what they are involved in. They can become truly involved in the 'here and now' problems and ideas without excessive risktaking.

b. Stress and Knowledge: Change as Challenge

Having both worked in the area of Child Development, Pam and Kent were reasonably familiar with what to expect from Matthew. They had used educational resources to acquire tools for coping with these new situations which they found most sustaining. Both these qualities allowed Pam and Kent to be reasonably flexible in meeting Matthew's constant changes. Stress resistant people generally have knowledge and intelligence to see alternative solutions to problems: they perceive change as healthy challenge.

c. Stress and Ego-Identity: Personal Power

Pam and Kent both felt comfortable about themselves, having waited to have Matthew until they felt mature enough to cope with him. They felt strong enough to find certain resources (their doctor and educational resources) that they needed. They could reasonably maintain their own locus of control in the face of opposition. Furthermore, Pam and Kent showed considerable self awareness of the positive and negative effects of the way that they were parented. They could perceive how they had been affected and were desirous of not repeating the mistakes they had experienced. Stress-resistant people generally

have a strong ego identity and a sense of control in their lives.

Negative Personal and life-space Attributes for Coping with the Stresses of Pregnancy, Birth and Breastfeeding

In spite of their individual and combined positive attributes the early few months of nursing their first baby, Matthew, was a tremendous ordeal -- particularly for Pam who described herself as never having worked harder in her life.

a. Stress and Social Network

Pam and Kent both experienced increasing stress when confronting societal situations that they perceived as devaluing of children and the nurturing aspects of fathering, and when they experienced institutions tending to over-run the individual's time scales and emotional needs. Indeed, their situation is a classical example of the negation of human values leading to increased stress levels for individuals! In addition, their immediate support group was minimal. Although Pam could comfortably avail herself of education resources, she could not use resources to help in home maintenance, and could not use her mother's support at this time because she did not, in fact, perceive her mother as supportive. Stress resistant people, however, are generally committed to a stable and continuing social network.

b. Stress and Personal Knowledge: The Unavailability of Role-Models

Neither Pam nor Kent felt that their parents had offered them good role models as nurturers. Neither of them had been breastfed or really been involved with others breastfeeding. Moreover, both of them had had a struggle against their parents to maintain their

instinctual 'feeling lives' as children and through adolescence. Coping effectively with stress frequently requires the type of personal knowledge that cannot be acquired from books or formal teaching; it can only be learned by deep and pervasive personal interaction with 'significant others'. This is possibly nowhere more true than for the type of personal knowledge needed by parents who seek to nurture their children through breastfeeding.

c. Stress and the Feminine Mode of Receptivity

Throughout the study I have talked, in a spiralling fashion, of the importance of 'the feminine' for a true appreciation of the creative employment of the relaxation response. I have also said that this appreciation of the feminine essentially involves deep body awareness and acceptance, and that this forms the solid basis for eventual ego transcendence -- true 'objectivity'.

Although Pam and Kent were aware of the importance of effective stress management they did not appear to perceive 'the feminine' as related to it. Certainly they could cope with stress at many levels. But underlying all this was Pam's struggle to orient herself to the unfamiliar attitudes of feminine consciousness as I have described it -- some new approaches to tasks and problem solving, new conceptions of time, new experiences of consciousness and unfamiliar awarenesses of the body. This was true even though intellectually Pam knew that her ability and willingness to nurse her baby was of significance in her understanding of feminine nature.

Also she was attempting this 'passage' with no feminine models -- in fact, she was handicapped by a negative, pessimistic, critical

mother image. And because of this Pam had perhaps overidentified with the outgoing, entirely optimistic outlook of her father, which of course would have been sanctioned in our society. Such a combination of a negative mother image and an overly positive father image would make it extremely difficult for a woman to breastfeed, no matter what other advantages she possessed. Moreover, Pam was functioning in virtual isolation in a society where pregnancy and birth and breastfeeding are not perceived as sacred. Body experiences in our society are rarely associated with transcendental qualities. Thus, these important life events have been stripped of so many of their layers of meaning, and cannot be experienced as times of celebration for a community of like-minded individuals.

Further Study

Results of interviews and data collection of the pilot study, together with "emergent theory", suggest that not only is this topic worth pursuing further, but that it is also important that this should be undertaken to align our developing understanding of stress with the early development of children. There are three possible strategies which suggest themselves to me:

1. Large scale questionnaire study of personality/life-space differences between couples who elect to (and in fact do) breastfeed and those who bottle feed -- with specific reference to their own relaxation response ability. Details of the questionnaire could be drawn from what is already known about stress management in general and could be adapted from other studies (See Chapter VI). They should include items that specifically relate to breastfeeding and an appreciation of the feminine modality in general.

Also, many details from the present single case study are suggestive of useful questions. Such a study would have the disadvantages of being 'in questionnaire form', but it would have the advantage of aligning this topic with similar research done on stress management in general.

2. A longitudinal monitoring of hormonal changes in mother dyads, coupled with a monitoring of babies smiling and sucking, in two feeding groups. For example, this would be helpful to validate aspects of Geber's work on the reduction of steroids through holistic nurturing. It could be that our society induces such stress for potential holistic breastfeeding parents, that only over a period of time would any deeper state of relaxation be attained.

It would also be important to discover more details of the baby's 'sucking' functioning as an early self-regulation ability, and 'smiling' as an early indicator of the development of a rudimentary sense of personal power that can elicit appropriate behaviour from others.

3. The third avenue of possible enquiry is the one that most interests me. It has to do with a basic suggestion of this pilot study that women who are comfortable with their bodies, as an aspect of the feminine awareness, both at a conscious and unconscious level, will be better able to breastfeed.

I would like to explore this suggestion through a study of the possible complexes surrounding this body awareness. Jung describes the ego as

> the psychological expression of the firmly associated combination of all body sensations.

He goes on, however, to say that

> reality sees to it that the peaceful cycle of egocentric ideas is constantly interrupted by ideas with a strong feeling-tone, that is, by affects. A situation threatening danger pushes aside the tranquil play of ideas and puts in their place a complex of other ideas with a very strong feeling tone. The new complex then crowds everything else into the background. For the time being it is the most distinct because it totally inhibits all other ideas. (Campbell, 1976, p. xiii)

Campbell explains that "it was by touching and activating a subject's feeling toned associations that Jung's word test exposed the hidden "facts" of his life -- i.e., the individual's unexplored complexes that in effect direct the person's life, if they remain in an unconscious state.

In the breastfeeding situation I would want to explore the parents' body awarenesses as they relate to their complexes in order to find out the 'hidden' reasons for the ways they approach nurturing their babies. I would like to approach the topic through the word association test, measurements of galvanic skin responses, in conjunction with extended 'clinical-type' interviews.[3]

An initial study of a single case is useful in opening up a topic for further exploration. As I review the thesis it sparks all sorts of questions and ideas for me. It is my hope that it will have a similar effect on others who may read it.

Notes

1. Green and Green (1977) describe the association between increases in peripheral skin temperature and relaxation thus:

> "When blood vessels increase in diameter, blood volume increases, and within seconds the temperature of the finger begins to rise. The diameter of the blood vessels, in turn, is regulated by smooth muscles in the vessel walls ... which (are) controlled exclusively by the action of the sympathetic section of the autonomic nervous system. (p. 48)

Essentially, blood flow can be increased by decreasing sympathetic firing, which in turn is 'controlled' by the hypothalamus. However, the stresses of life are known to activate the sympathetic nervous system. If stress is prolonged psychosomatic disorders may result.

2. Certain groups of people (such as the Arapesh of New Guinea) expect that the father will contribute to the health and welfare of his unborn baby through preparing an emotionally supportive, stress-free environment for the pregnant woman. In fact, the verb "to bear a child" applies equally to men and women (Kitzinger, 1978).

Interestingly, Kitzinger suggests that the psychosomatic complaints many men experience where their wives are pregnant (the 'couvade syndrome' may be "substitutes for the rituals and taboos observed by expectant parents in many other societies.

3. In exploring women's 'unconscious' 'Self awareness' it would be important to study their dreams. Kitzinger's preliminary cross-cultural work suggests that

> The English woman's dreams were much more likely than the Jamaican to be disturbing and to involve danger. There were often situations in which they found themselves exposed, humiliated and at the mercy of forces beyond their control: there were dreams of physical injury, often involving amputation of a limb... The birth of a baby often seemed to be a loss of a part of the self, and not just a loss but a surgical removal (Kitzinger, 1977, pp. 100-101).

CHAPTER VIII

A PERSONAL JOURNEY

> When I would comfort myself against sorrow my heart is faint in me.
>
> Is there no balm in Gilead; is there no physician there? Why then is not the health of the daughter of my people recovered?
>
> Jeremiah 8 18, 22

One of the aims of this study, as an alchemical process, has been to attempt to place it within my own development -- as explicitly as possible. The thesis started by explaining how I became interested in the field. I conclude it now by trying to say a little of the effect of the thesis on my psyche and personal awareness.

In general, of course, it has been particularly significant for me to see the subjects of 'breastfeeding' and 'relaxation' embedded in the predominantly masculine paradigm of our western, technologized society. Because this masculine consciousness has not been balanced by the feminine we have been left with depleted selfhoods, narrowly conceived ideas of linearity of causation within a restricted vision of time. In addition, the spiritual dimensions of our existance are denied us, along with the establishment and maintenance of our full potential for health.

To stand within the reigning paradigm of masculine consciousness, and critically appraise a breastfeeding situation, which embodies so much of the feminine modality is extremely difficult. Such a critique essentially involves a personal existence/knowledge of body/mindedness, and certain other attributes of the feminine modality such as altered time perceptions, openness to new forms of imagery, that naturally

follow in the 'wake' of body'knowing. It is very clear therefore, that the feminine perspective is not only concerned with social issues, but also with vital intellectual considerations.

Seeing the position of today's woman more clearly has been important for me. Certainly in the past women have been trained to "suppress their potential for autonomous derivation of meaning and to gain their sense of worth from reflected praise from others, rather than directly by independent effort" (Ariete and Beinborad, 1980). And so now women are being encouraged to be more assertive, independent and vocal, in order to escape from passivity dependent relationships. However, because of the prevailing norms and expectations of a society dominated by masculine consciousness, this presents women with a dilemma which some are beginning to articulate (Colegrave, 1979; Woodman, 1980; Robbins, 1980). For woman's 'forming' and 'focusing' to be wholesome it must proceed from an immersion in the very 'feminine consciousness' that is unvalued in our society. (Of course, this invalidation of the feminine is also disastrous for men). So many women grow up knowing only 'passivity', not 'receptivity' (see Chapter V, page 78). Therefore they never are able to completely harness the positive and creative drive of their 'internal' 'masculine consciousness'. Of course, this means that they will be unable to perceive their nurturing role as mothers and healers as a creative process arising out of their receptivity towards life flowing through them. In excavating 'the feminine' I have of course been excavating aspects of myself. But I can see, also, that the nurturing, healed and healing parts of me arise out of a synthesis of masculine and feminine, spirit and body, motion and form, creative drive and

relaxation.

Research as a Healing Process

I have described healing as a continuous process of moving towards a state of wholeness and balance throughout the mind/body continuum. Sometimes healing is perceived as a dramatic occurence if that general process had previously been impeded in some way. Essentially I have shown that healing/wholeness can only occur when the ego can be transcended (see Chapter III). I have also followed more of an alchemical approach to research where the aim is to transform the researcher, also through ego-transcendence (see Chapter I) -- the ability to become more truly objective by relating to the Self. That is, I have suggested that the most legitimate aim of research is to propell the researcher towards greater wholeness. For this to occur her enquiry has to arise from her own existential search for meaning and relatedness. A superficial question, grafted on to 'unrelated' inquiry, will never carry with it the healing potential. The 'question' must in fact be a creative 'quest' arising out of relaxed perceiving. Willful, intellectual curiosity does not lead to the Self (vonFranz, 1975).

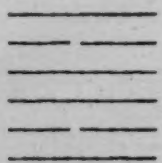
It is only in the last two years that I have 'learned' to consciously elicit the relaxation response. When I nursed my baby it began to happen to me. Certainly that 'happening' changed my life. It is always hard for an asthmatic to exhale -- to 'let go': a descent into the feminine was a fearsome process in many ways.[1] But I have had to learn to put that experience into a 'form' that allows me to share it with others.[2] There is now felt meaning for me in knowing that when relaxation reaches the periphery of the 'body' and 'mind'

is free to expand. I see myself as having been in a process of moving from a state of more general feminine awareness, into a state of greater balance, through using the masculine abilities of 'focusing' and 'refining'. But although I see that overall swing of general psychic pattern, I am aware of smaller fluctuations within the general.

Discipleship of Balancing: Feminine Foundation

'Dreams' and increasing 'body awareness' are my guides in my attempts to balance consciousness. If my life becomes too busy in the pursuit of 'doing' and I ignore my body messages I meet an angry woman in my dreams. She lives in a whirlwind of confusion because of insatiable curiosity that has become willful and disrespectful. And this woman dissipates her energy and slowly dies.

But a warning came to this whirlwind woman through an I Ching reading. She was told that without the warning she would have been in danger of consuming herself like a flame.



The Clinging Fire

The reading continues:

> A luminous thing giving out light must have
> within itself something that perserveres;
> otherwise it will in time burn itself out ...
> (Wilhelm/Baynes, 1950, p. 119)

The woman is told that in cultivating extreme docility and voluntary dependence, she "will acquire clarity without sharpness and find (her) place in the world." What is involved for the woman is a change of a heart -- a heart nourished endogenously by the balm of Self-Soothing. The whirlwind woman has allowed me to realize the immediacy of my

continual need to elicit the relaxation response of feminine consciousness in order to live with clarity and vision and without violence and sharpness.

Discipleship of Balancing: Appreciation of the Masculine

It is not just the whirlwind woman who pulls me off course, if I am not watchful. There is also that part of me that remains 'satisfied' with what is, in effect, still confusion: then I find myself irritable and bad-tempered and tending to blame it on 'others' or some situation I have encountered. Actually, I have discovered that I become irritable when I have not put into a 'form' something that is 'inside me', waiting to come out, as it were. So that working on my thesis has had a strangely calming effect on me. Von Franz (1972) talks about the irritability of "unlived creativeness": This is the closest I can come to apprehending it.

I am not saying that my aim is to make all explicit -- that would deny mystery, and therefore deny Life. But allowing my 'form' to arise, with as much clarity as my present consciousness can sustain requires a constant balancing process.

The Love-Change of Human Consciousness

An appreciation and union of both the masculine and feminine modalities within the psyche allows for an experience of love -- "the hallmark of the androgynous consciousness" (Colegrave, 1979). Being able to elicit the relaxation response of Self soothing[3] and thus appreciate both the masculine and the feminine, allows me to be able to "stand alone" in relative comfort -- at least some of the time! And strangely it is this 'standing alone' in an attempt to balance masculine

and feminine that allows me to begin to experience love which seems to be independent of me. Jolande Jacobe explains that when we have perceived the controsexual element in ourselves

> the other sex (looses) its magic power over us, for we have come to know its essential traits in the depths of our own psyche. We shall not easily 'fall in love' for we can no longer lose ourselves in someone else; but we shall be capable of a deeper love, a conscious devotion to the other. (Jacobi, 1973, p. 123)

Of course this 'love child', produced by the complementarity of masculine and feminine, is not just concerned with heterosexual relationship. It is a symbol of a way of 'caring', 'loving' and nurturing of children, ideas, research, the distant mountain top, and the magpie in the garden. The integration of body and spirit allows for one of the many rebirths we may expect in our lives.

To be able to understand and value the human ability to nurture appears to involve familiarity with the creative management of stress, which in turn is connected with how individual women are able to relate to and value their bodies -- seeing them as a resource rather than as their destiny. Adrienne Rich maintains that women's control of their bodies will bring fundamental change to human society. She says:

> We need to imagine a world in which every woman is the presiding genius of her own body. In such a world women will truly create new life, bringing forth not only children (if and as we choose) but the visions, and the thinking, necessary to sustain, console and alter human existence -- a new relationship with the universe. Sexuality, politics, intelligence, power, motherhood, work, community, intimacy, will develop new meanings: thinking itself will be transformed. (Robbins, 1980, p. 29)

Furthermore, seeing the early developmental basis for the later

possibility of the transcendent experience in historical perspective makes it even more fascinating. In appraising Lloyd 'de Mause's seminal work of "breathtaking sweep and grandeur" on the evolution of childhood, Henry Ebel says,

> that a direct line runs from the 'chosen' feeling of the Hebrews to the 'chosen' feelings manifested by the Puritan mothers who began to relate empathetically to the children at their breasts and that what 'de Mause calls the 'evolution of childhood' is the geographical and eventual global spread of feelings once confined to a small corner of the Mediterranean basin. (Ebel, 1977, p. 76)

Since it seems that adults ability to truly empathise with children is a relatively new ability (with notable, individual exceptions), discovering the intricacies of 'empathy' can indeed be thought of as important step in the development of human consciousness. In essence, it would seem that the transcendent experience of true objectivity arises out of that early empathetic experience of 'the feminine' ability to nurture, with its emphasis on the importance of bodily experience. We know that the inanimate environment provides for the baby only impoverished stimuli towards human understanding. Caregivers need to interact with their babies in an appropriate and sensitive manner -- to the baby's own activities and spontaneous reactions. This allows consciousness to become rooted in the body. From a secure base of body-knowing individuals can venture into an exploration of trans-personal mind and gradually perceive more of their place in the universal hologram, becoming aware of the feedback loops between intra-psychic and inter-psychic consciousness, and thus learn to live non-violently. But this social mediation is under-rated by not only Piaget but by most other contemporary theorists in developmental psychology (Newson, 1974).

It seems as if we are at a possible turning point in our society's consciousness. The old matriarchy embraced both the masculine and feminine principles -- but in an undifferentiated unity (Colegrave, 1979). The rule needed to be overthrown in order for the separation and development of the two principles in human consciousness. Now it is possible to have this individuality and relationship, through conscious collaboration with nature.

Redressing the present imbalance of masculine consciousness can allow individuals to truly experience love. This love cannot be confined by the tyranny of convention; it alone has the power to forge change in a holistic, human sense because it is based on relationship -- which allows for true objectivity. The energy and 'spirit' of this love-change as 'figure' emerges, like all acts of creation, from formless ground (See Chapter IV) -- from the fecund, nurturing 'containment' of the feminine.

A Symbol Revitalized

So many other cultures seem unafraid to make symbolic connections with birth and the immediate post-partum period, of which breastfeeding is an important aspect. And so for them this period of maternalité is still rich in meaning and spiritual significance. So too, our own women artists are beginning to feel the necessity to explore the symbols of woman's body and, concurrently, the symbols of nurturance (Snyder-Ott, 1978; Chicago, 1975). I am strengthened and comforted by their work and by that of other women endeavouring to blend personal sharing with serious scholarly investigation (Robbins, 1981) in a manner that I have attempted.

In the country where I was born a woman giving birth is often

presented with a tightly furled flower bud. This is to encourage her to open her body to reveal her child, just as the flower opens to reveal its own form and fragrance. I have thought a lot about this flower and discovered, to my great surprise, that a flower is also a symbol of the breast,[4] and therefore a symbol of nurturance -- nurturance of humanity by the feminine, and nurturance of the feminine by human kindness. In her authobiography Through the Flower the great American artist, Judy Chicago says,

> Moving 'through the flower' is a process that is available to all of us, a process that can lead us to a place where we can express our humanity and values as women through our work (her emphasis) and in our lives and in so doing perhaps we can also reach across the great gulf between masculine and feminine and gently, tenderly, but firmly heal it. (Chicago, 1975, p. 206)

This nurturing flower symbol, for me now revitalized and androgynous, shows the power of the receptive in allowing for vibrant birth. The energy of the cosmic hologram, manifested in individual consciousness, arises out of the search for balance between Yang and Yin, between stress and relaxation, between masculine and feminine modalities -- a balancing of polarities. And it seems that

> We can never be born enough. We are human beings for whom birth is a supremely welcome mystery, the mystery of growing, the mystery that happens only and whenever we are faithful to ourselves. (E. E. Cummings, quoted by Pearson, 1968)

Notes

1. I now see a 'psychosomatic symptom' as an 'emergence' and isolation of a particular aspect of the individual's system. This can provide him with an opportunity to become more aware of the connecting patterns in the system. When that task is accomplished, that particular 'aspect' can simply sink back into the general and well functioning system.

2. I can see, in retrospect, that my most recent series of stitchery pieces preceeded, visually, the progression of my thesis.

3. Rickles (1980) uses the phrase 'self soothing'. I have 'moved' that to Self soothing to incorporate the body basis of transpersonal mind.

4. From discussion with Dr. Jane Silvius, Child Development Centre, Edmonton, Alberta, Canada.

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